# THE IMPLEMENTATION OF RESPONSE TO INTERVENTION (RTI): AN INDIANA CASE STUDY

A DISSERTATION

SUBMITTED TO THE GRADUATE SCHOOL

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS

FOR THE DEGREE

DOCTOR OF EDUCATION

BY

CHARLES R. GRABLE

DISSERTATION ADVISOR: DR. SERENA SALLOUM

BALL STATE UNIVERSITY

MUNCIE, INDIANA

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APPROVED BY:

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BALL STATE UNIVERSITY

MUNCIE, INDIANA

MAY, 2019

# DEDICATION

I dedicate this dissertation to my wife and two children who inspire me to pursue my passion for education and act with integrity in all facets of my life, and to my parents for providing me the foundation to strive for excellence with each opportunity that is presented.

# ABSTRACT

**DISSERTATION/THESIS/RESEARCH PAPER/CREATIVE PROJECT:**

Response To Intervention (RTI) Implementation: Lessons Learned From Two Successful Schools

**STUDENT:** Charles R. Grable

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Response to Intervention (RTI) is defined by the National Association of State Directors of Special Education (NASDSE) as the practice of providing high-quality instruction and intervention matched to student needs and using learning rate over time and level of performance to make important educational decisions (2007). Both IDEA 2004 and the Every Student Succeeds Act (ESSA) utilize RTI as the foundation to assist struggling students through a multi-tiered system of support and to gather instructional or behavioral data required to make important educational decisions, such as identifying a student with a specific learning disability. The complex nature and multiple components of RTI have made it difficult for schools across the country to implement effectively (Hall, 2008; O'Conner & Freeman, 2012; Mellard et al., 2010; Robinson et al., 2013; Zirkel & Krohn, 2008; Fuchs et al., 2008).

The purpose of this qualitative case study was to examine the RTI implementation in two Title I elementary schools that were nominated for or received the Indiana Title I Distinguished School Award, one urban and one rural, that have shown growth or consistently have 80% or higher of the students passing Indiana's IREAD-3 exam. The study was designed to analyze

which school factors made their RTI implementation and performance on IREAD-3 successful. Furthermore, this study sought to identify implementation concerns in the following areas: general understanding and implementation of the core components of RTI (Lembke et al., 2010); implementation of systems or processes for monitoring the fidelity of implementation; implementation of a universal screening, progress monitoring, and problem-solving method for data-based decision making within the multi-tiered model; access to an use of research-based, scientifically validated instructional and intervention strategies; professional development on each component of RTI for all stakeholders; and alignment between RTI's early identification and intervention and identification of student with specific learning disabilities.

Through the analysis of staff interviews and classroom observations, several key findings emerged related to successful RTI implementation. The two schools utilized a variety of universal screening and progress monitoring assessments to guide their decision making, both within grade level teams and RTI Teams. Both schools utilized a physical data wall to track student growth on these assessments. The two schools also identified RTI's early identification and intervention and their focus on small group reading instruction as factors that led to their success on IREAD-3. The rural school partnered with a local university to provide a university faculty advisor that attended all of the school's RTI Team meetings. The university advisor provided insights into data and interventions, as well as ongoing professional development.

Although both the rural and urban school identified RTI as a factor that led to their success on IREAD-3, there were gaps in their implementation. Both schools identified staff buy-in and professional development as barriers to implementation. Neither school had a well-defined plan for providing ongoing professional development for staff in all of the components of RTI which leads to gaps in understanding and buy-in. The two schools also did not have well-

defined processes or procedures to monitor for the fidelity of implementation of the components of RTI. This included a lack of policy or guidance documents to aide in that process. This study identified several key components to successful RTI implementation and areas of implementation concern in which schools can focus their effort to avoid the typical pitfalls in implementing this complex model of a multi-tiered system of supports.

# ACKNOWLEDGEMENTS

As I reflect on my thirteen years of K-12 education at Pioneer Regional Schools, four years as an undergraduate at the University of Indianapolis and Ball State University, numerous years as a graduate student at Ball State University, and twenty-nine years as an educator, I am extremely grateful and indebted to all of the individuals that guided me on my path to become an educator. I chose this rewarding path due to the influence of the incredible teachers and coaches I had at Pioneer Regional Schools. I would also not be successful at this level of administration if it were not for the amazing mentors that I've had along the way, such as Dr. Serena Salloum, Gene DeHaven, Dr. Max Spaulding, Dr. Tracey Shafer, Dr. Steve Benjamin, Dave McKee, or Dr. Lee Harman, just to name a few.

I am especially grateful to my first teachers, my parents Richard and Ann Grable. Their love, support, and self-sacrifice for my sister and me taught us that hard work and perseverance allows you to reach your potential and dreams. I have an extremely rewarding career and come home to the most incredible family. My supportive wife Lori is my rock, my love, and my best friend. She has given countless hours to allow me to pursue my doctorate. To my children—Zach and Paige—thank you for the privilege of being your father. Your unconditional love and passion for life makes me want to create a better world.

Thank you to those who have read this dissertation and challenged my thinking. My committee members Dr. Ruth Jefferson, Dr. Nick Elam, and Dr. Fenwick English, along with prior committee members Dr. John Ellis and Dr. Jeff Swensson, gave me guidance and direction to provide a quality final product. Friend and colleague, Dr. Adam Drummond, also provided the extra support and guidance needed to cross the finish line. Lastly, a world of gratitude to Dr.

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# CHAPTER ONE

The No Child Left Behind (NCLB) Act of 2001 and the reauthorization of the Individuals with Disabilities Education Improvement Act of 2004 (IDEA 2004) ushered in a new era of support for academically and behaviorally at-risk students referred to as Response to Intervention (RTI). The National Association of State Directors of Special Education (NASDSE) defines Response to Intervention (RTI) as the practice of providing high-quality instruction and interventions matched to student needs and using learning rate over time and level of performance to make important educational decisions (2007). In comparing the language supporting RTI in NCLB and IDEA 2004, NASDSE states:

> The language in IDEA 2004 and NCLB are similar. Both stress the use of professionally sound interventions and instruction based on defensible research, as well as the requirement to deliver effective reading and behavior programs that will result in improved student performance and fewer children requiring special education services. (2007a, p. 17)

This move to early identification and intervention based on a student's response to core instruction, universal screenings, interventions, and progress monitoring is a positive step in educational reform because it will ultimately change the teaching and learning practices of every single teacher and student (Bender & Shores, 2007; Brown-Chidsey, 2007; Ehren, 2013; Noll, 2013). Bill East, Executive Director of NASDSE, pointed out in the Foreword of Jimerson, Burns, and VanDerHeyden's *RTI Handbook* that RTI provides the best opportunities to all students, including gifted or challenged learners, to "…be equally valued in an education system where the progress of every child is monitored and individualized interventions with appropriate levels of intensity are provided to students as needed" (2007, p. xiii).

In NASDSE's definition of RTI, data gathered through the implementation of interventions matched to student needs are compared to the student's learning rate over time and his current level of performance to make important educational decisions. Under the guidelines of IDEA 2004, these important educational decisions include eligibility for a specific learning disability (SLD). As described by the National Center for Learning Disabilities (2014), a SLD will "affect the brain's ability to receive, process, store, respond to, and communicate information" (p. 2). The eight areas covered by specific learning disabilities are oral language, listening comprehension, written expression, basic reading skills, reading fluency, reading comprehension, mathematical calculation, and mathematical problem solving. In contrast, "SLD eligibility determination using the current IQ-achievement discrepancy causes harm by delaying treatment from kindergarten or first grade, when academic and behavior problems first emerge, to later grades when persistent achievement problems are more difficult to resolve" (NASDSE, 2007a, p. 10). In other words, the Discrepancy Model was a "wait to fail" model, students are typically not identified with special needs until they have shown a pattern of failure over time, while the RTI Model is one based on early identification and early intervention. RTI implements a process that is proactive and preventative instead of reactive after the student has shown a pattern of failure.

State departments of education, school districts, and individual schools across the country have been working to implement RTI over the past ten years. The successful implementation of RTI is certainly not without its challenges, including ongoing, differentiated professional development; identification of research or evidence-based instructional strategies, assessments, and interventions; funding; a "silo" mentality between various school programs (i.e. general education, special education, and Title I); leadership; and fidelity of implementation (O'Conner

& Freeeman, 2012; Zirkel, 2011; Robinson, Bursuck, & Sinclair, n.d.; Burns et al., 2013; Mellard et al., 2010; Fuchs, Fuchs, & Vaughn, 2008). Some states, districts, and schools have been more successful than others in this endeavor. Due to this lack of consistency and the complexity of RTI implementation, this case study seeks to identify successful strategies in implementation and monitoring for fidelity in schools that have high proportions of students passing IREAD-3, Indiana's third grade reading assessment.

## Statement of the Problem

The Indiana legislators, Indiana State Board of Education, and the Indiana Department of Education (IDOE) have adopted policy, (HEA) 1367 also known as Public Law 109 (2010), that require students to pass the IREAD-3 reading assessment at the end of third grade to be eligible for promotion to fourth grade unless the student meets one of the "Good Cause Exemptions". There are three exemptions that allow a third grade student who has not passed the IREAD-3 exam promotion to fourth grade: (1) the student has already been retained twice, (2) the case conference committee for a special education student with an Individualized Education Plan (IEP) has determined that promotion is appropriate, or (3) the Individualized Learning Plan (ILP) committee for an English Learner (EL) student (students' with a primary language other than English and are still working to acquire the English language) has determined that promotion is appropriate (Indiana Department Of Education, n.d.). This law puts a great deal of pressure on schools to ensure that every student is reading at or above grade level by the end of third grade unless he/she is identified with a specific learning disability or in the EL program.

When determining a student's eligibility for a specific learning disability (SLD), such as a reading disability, Indiana's special education rules (also known as Article 7) states that a SLD, can be evidenced through either of the following:

> (A) Insufficient progress to meet age or state approved grade level standards in one (1) or more of the areas identified in subdivision (1) when using a process based on the student's response to scientific, research based intervention.
> (B) A pattern of strengths and weaknesses in performance or achievement, or both, relative to
> (i) age;
> (ii) state approved grade level standards; or
> (iii) intellectual development;
> That is determined by the group to be relevant to the identification of a specific learning disability. The multidisciplinary team is prohibited from using a severe discrepancy between academic achievement and global cognitive function to meet this requirement. (Title 511 Article 7, Rules 32-47, 2010, p. 76-77)

Due to this adoption at the state level of an RTI process and prohibiting districts from solely using the discrepancy model for SLD identification, Indiana districts and schools have been working to implement RTI. In Indiana, and across the country, RTI is now the vehicle to provide early identification of struggling learners and early intervention to prevent failure, including the identification of a SLD if the child is nonresponsive to those interventions. However, as noted by Zirkel and Krohn (2008), "The implementation of RTI, as the professional literature is now making clearer, is a major challenge, requiring a comprehensive commitment by general education and careful coordination with special education" (p. 73). With the IREAD-3 exam impacting every third grader and every elementary school in the state of Indiana, successful RTI implementation is the avenue to provide the early identification and intervention to those students struggling with reading or those that potentially have a SLD. However, as researchers have pointed out, finding examples of successful RTI implementations is difficult at best (O'Conner & Freeman, 2013; Zirkel, 2011; Mellard, McKnight, & Jordan, 2010; Ehren, 2013; Robinson, Bursuck, & Sinclair, n.d.; Burns, Egan, Kinkel, McComas, Perterson, Rahn, & Wilson, 2013; Zirkel & Krohn, 2008; Fuchs, Fuchs, & Vaughn, 2008).

## Purpose of the Study

The purpose of the study is to examine the RTI implementation in two Title I elementary schools from two Indiana school districts that have shown growth between March, 2012 and March, 2015 on the IREAD-3 assessments or consistently have 80% or higher of the students passing IREAD-3. The Title I elementary schools, one rural and one urban, were nominated for or received the Indiana Title I Distinguished School Award. The study will analyze factors that potentially made their RTI implementation and performance on the state's IREAD-3 reading assessment successful and identify implementation concerns in the following areas:

- Implementation and general understanding of the core components of RTI.
- Implementation of systems or processes for monitoring the fidelity of implementation.
- Implementation of a universal screening, progress monitoring, and problem-solving method for data-based decision making within the multi-tiered model.
- Access to and use of research-based, scientifically validated instructional and intervention strategies.
- Professional development on each component of RTI for all stakeholders.
- Alignment between RTI's early identification and intervention and identification of students with specific learning disabilities.

## Significance of the Study

This study is important because it identifies the strengths and needs of two Indiana schools regarding the implementation of RTI's core elements and its implications on IREAD-3 scores. Proper implementation of RTI requires a considerable amount of background knowledge and training on the part of all stakeholders concerning the following RTI core elements identified by Lembke, Garman, Deno, and Stecker (2010):

1. Administrative and staff support.
2. Establishment of school-based problem-solving teams.
3. Selection of an evidence-based, formative assessment system that includes screening and progress monitoring.
4. Examination of the core academic program currently in place to make sure it is meeting the needs of the majority of students.
5. Team analysis of school-wide data and placement of students in tiered instructional groups.
6. Identification of interventions for Tier 2 and 3 and a schedule for implementation of the tiered interventions.
7. Determination of how fidelity of treatment for Tiers 1-3 will be assessed.
8. Identification of staff members responsible for monitoring the progress of students in Tiers 2 and 3 on a frequent basis, including goal setting, collecting data, implementing data-decision rules, and making changes in instruction.

Based on the limited amount of research previously conducted on the successful implementation of RTI and information and knowledge gained from the two Indiana schools that are successfully implementing RTI processes and seeing the positive results of those processes on IREAD-3 results in this study, other elementary schools in Indiana, and across the country, will be able to reflect upon the lessons learned and adapt or replicate those practices to their own situations.

## Research Questions

The following research questions guided this study:

1. How are the identified schools utilizing and monitoring for the fidelity of implementation of all core components of RTI identified by Lembke et al. (2010)?
2. What written policies, written procedures, resources, guidance documents, or professional development plans has the district and/or building level leadership established as a framework for implementing and sustaining RTI, and how do the documents describe the fidelity of RTI implementation?
3. What process do the identified schools utilize to identify the research-based, scientifically validated instructional and intervention strategies used within the multi-tiered model?
4. How do teachers involved in RTI perceive the impact of RTI's early identification and intervention on the identification of students with specific learning disabilities?

## Delimitations

Response to Intervention is a very broad concept. Therefore, the following delimitations have been established for this dissertation:

- This study only included the knowledge and implementation of the core elements of RTI identified by Lembke et al. (2010). Those components are: administrative and staff support; establishment of school-based problem-solving teams; selection of an evidence-based, formative assessment system that includes screening and progress monitoring; examination of the core academic program currently in place to make sure it is meeting the needs of the majority of students; team analysis of school-wide data and placement of students in tiered instructional groups; identification of interventions for Tier 2 and 3 and a schedule for implementation of the tiered interventions; determination of how fidelity of treatment for Tiers 1-3 will be assessed; determination of professionals who will monitor the progress of students in

Tiers 2 and 3 on a frequent basis, including by setting goals, collecting data, implementing data-decision rules, and making changes in instruction.

- This study focused on Tier I, Tier 2, and Tier 3 instruction and interventions for reading. It did not focus on the behavioral side of RTI. However, behavioral issues can certainly impact a student's ability to learn reading skills in the classroom.
- Only two elementary schools from two separate school districts that fall under the jurisdiction of the Indiana Department of Education were included in this study.
- Schools were selected based on steady growth on IREAD-3 scores over time or by consistently having eighty percent or higher of its students passing IREAD-3.
- The schools identified consisted of two Title I Elementary Schools, one rural school and one urban school, that were nominated for or received the Indiana Title I Distinguished School Award.

## Definitions

In order to fully understand the purpose of this study, a few key terms are defined:

- *Aimeline*: "Line on a graph that represents expected student growth over time" (idea Partnership, 2007, p. 1).
- *Data-based Decision Making*: "A systematic and ongoing process of data analysis and evaluation to help inform important educational decisions" (Kashima, Schleich, & Spradlin, 2009. p. 6).
- *Differentiated Instruction*: "Attending to the learning needs of a particular student or small group of students rather than the more typical pattern of teaching the class as through all individuals in it were basically alike" (Tomlinson & Allen, 2000, p. 4). "Differentiation of instruction is a teacher's response to learner's needs guided by general

principles of differentiation, such as respectful tasks, flexible grouping, and ongoing assessment and adjustments. Teachers can differentiate content, process, or product according to student's readiness, interest, or learning style through a range of instructional and management strategies" (Tomlinson & Allen, 2000, p. 3).

- *Discrepancy Model*: "Difference between two outcome measures; IQ-Achievement discrepancy is the difference between scores on a norm-referenced intelligence test and a norm-referenced achievement test" (idea Partnership, 2007, p. 2).
- *Disproportionality*: "The over- or under-representation of minority students in special education. In other words, there is a disproportionate number, either a significantly larger or smaller percentage, of students from a specific minority background receiving special education services than the percentage of that minority in the population generally." (RTI Action Network: www.rtinetwork.org/glossary).
- *Fidelity of Implementation*: "The delivery of content and instructional strategies in the way in which they were intended to be delivered. The delivery of instruction must be accurate and consistent. Although interventions are aimed at students, fidelity measures are focused on the individuals who provide the instruction" (Johnson, Mellard, Fuchs, & McKnight, 2006, p. 52).
- *High-quality Instruction/Interventions*: "Instruction or intervention, matched to student need, that has been demonstrated through scientific research and practice to produce high learning rates for most students" (NASDSE, 2007a, p. 5).
- *LEA (Local Education Agency)*: "A public board of education or other public authority constituted for either administrative control or direction of, or to perform a service function for, publicly funded schools as such schools are established under the laws of

Indiana. The term includes school corporations and state-operated schools" (Special Education Rules, Title 511, Article 7, Rules 32-47).

- *Learning Rate*: "Refers to a student's growth in achievement or behavior competencies over time compared to prior levels of performance and peer growth rates" (NASDSE, 2007a, p. 5).
- *Level of Performance*: "Refers to a student's relative standings on some dimensions of achievement/performance compared to expected performance (either criterion or norm referenced)" (NASDSE, 2007a, p. 5).
- *Primary Levels of Intervention*: "Interventions that are preventative and proactive; implementation is school-wide or by whole-classroom; often connected to broadest tier (Tier 1 or core curriculum) of a tiered intervention model" (idea Partnership, 2007, p. 7).
- *Progress Monitoring*: "A set of assessment procedures for determining the extent to which a student or students are benefiting from classroom instruction. When applied with rigor, progress monitoring addresses the federal stipulations that students deemed as having a disability have not benefited from general education instruction" (Johnson et al., 2006, p. 51).
- *Problem-solving Approach to RTI*: "Assumes that no given intervention will be effective for all students; generally has four stages (problem identification, problem analysis, plan implementation, and plan evaluation); is sensitive to individual student differences; depends on the integrity of implementing interventions" (idea Partnership, 2007, p. 7).
- *Response to Intervention (RTI)*: "The practice of providing high-quality instruction and interventions matched to student needs and using learning rate over time and level of performance to make important educational decisions" (NASDSE, 2006).

- *SEA (State Education Agency)*: Any state educational agency, i.e.: The Indiana Department of Education (Special Education Rules, Title 511, Article 7, Rules 32-47).
- *Secondary Levels of Intervention*: "Interventions that relate directly to an area of need; are supplementary to primary interventions; are different from primary interventions; often implemented in small group settings; may be individualized; often connected to supplemental tier of a tiered intervention model (Tier 2)" (idea Partnership, 2007, p. 8).
- *Specific Learning Disability (SLD)*: "A disorder in one or more of the basic psychological processes involved in understanding or using language, spoken or written, that may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations, including conditions such as perceptual disabilities, brain injury, minimal bran dysfunction, dyslexia, and developmental aphasia. The term does not include learning problems that are primarily the result of visual, hearing, or motor disabilities, of mental retardation, of emotional disturbance, or of environmental, cultural, or economic disadvantage" (U.S. Office of Education, 1977).
- *Standard Protocol Model*: "Utilizes a set of standard research-based interventions usually implemented in two, three, or four tiers or levels. The interventions occur in a natural progression from tier to tier, and are similar for all students experiencing the same learning problems" (Bender & Shores, 2007, p. 12).
- *Tertiary Level of Intervention*: "Interventions that relate directly to an area of need; are supplementary to primary and secondary interventions; are different from primary and secondary interventions; usually implemented individually or in very small group settings; may be individualized; often connected to narrowest tier of a tiered intervention model (Tier 3)" (idea Partnership, 2007, p. 9).

- *Tiered Instruction*: "Tiered instruction is usually organized into three or four tiers, although some schools include more. Each tier is different, with each level having an increase in intensity, or an increase d number of teacher-student interactions" (Mellard, McKnight, & Deshler, 2007, p.6).
- *Tiered Model:* "Common model of three or more tiers that delineate levels of instructional interventions based on student skill needs" (RTI Action Network: www.rtinetwork.org/glossary).
- *Universal Screening*: "Data gathered before instruction to determine which students may require further (diagnostic) assessment and to provide schools and teachers with aggregate information about the nature of student achievement overall" (Wixson & Valencia, 2001, p. 467).

**Summary**

RTI, implemented properly and with fidelity, has the potential to reform general and special education in critical ways that will benefit all students (NASDSE, 2007a; Bender & Shores, 2007; Brown-Chidsey, 2007). As noted by Noll (2013), when RTI was implemented successfully, educators were focused on instruction, how well that instruction matched the needs of the students, and how data was informing the entire process. In RTI the screening and progress monitoring data is used to "make decisions about changes in instruction or goals and applying child response data to important educational decisions" (NASDSE, 2007). These decisions are applied to all aspects of instruction and intervention with the multi-tiered model and are guided by the outcome data.

> Child outcome data are essential to: making accurate decisions about the effectiveness and remedial education instruction/interventions; making early identification/intervention with academic and behavioral problems; preventing unnecessary and excessive identification of students with disabilities; deciding eligibility for special education

> programs; and determining individual education programs as well as delivering and evaluating special education services. (NASDSE, 2007a, p. 3)

Accomplishing this feat in schools provides numerous challenges to teachers and building and district leadership. In order to effectively implement all of the structures of RTI and to reap the potential benefits of those structures, schools must explore the research and examine the best practices from experienced, successful practitioners.

# CHAPTER TWO

# REVIEW OF THE LITERATURE

The purpose of this chapter is to review the relevant literature on RTI. This chapter will discuss the definition and benefits of RTI implementation; the history and support for RTI in federal policy to change the procedures of how special education students are identified, including some of the primary federal research and policy reports that led to RTI; the essential components and procedures of RTI; monitoring RTI implementation for fidelity; the professional development needs for RTI implementation; and lessons learned from RTI implementation.

## Definition and Benefits of RTI

There are numerous definitions of RTI in the literature. One commonly used definition comes from NASDSE (2007a), "RTI is the practice of (1) providing high-quality instruction/intervention matched to student needs and (2) using learning rate over time and level of performance to (3) make important educational decisions" (p. 5). Johnson, Mellard, Fuchs, and McKnight (2006) define RTI as, "an assessment and intervention process for systematically monitoring student progress and making decisions about the need for instructional modifications or increasingly intensified services using progress monitoring data" (p. i.2). Johnson et al. further define RTI as "a multi-tiered instructional delivery and intervention process frequently used to prevent chronic learning problems" (2006, p. 1.1). Finally, Bender and Shores (2007) define RTI as, "a process of implementing high-quality, scientifically validated instructional practices based on learner needs, monitoring student progress, and adjusting instruction based on the student's response" (p. 7).

What do these definitions have in common? RTI begins with high quality, scientifically based instruction for all students. Universal screening assessments are given to all students to evaluate the effectiveness of the core instruction and for early identification of struggling students. Those struggling students identified by the screening are provided with research or evidence-based interventions that increase in intensity within a multi-tiered design model. Identified students' progress is monitored with short, skill specific assessments that help drive instructional and intervention decision making within the multi-tiered model. The student's current level of performance compared to that of his peers and his performance over time help guide these important educational decisions, such as movement within the tiers or potential SLD placement. RTI is primarily designed around the concept of using universal screening and progress monitoring data to provide early identification and early intervention to struggling learners before a pattern of failure sets in for these students. It also forces schools and teachers to examine the quality of instruction for all students at its core level, often called Tier 1. As noted by Brown-Chidsey (2007), "RTI helps ensure that all students have equal educational opportunity" (p. 41).

RTI, implemented well and with fidelity, has the potential to substantially benefit all students by forcing educators to focus on the impact of their instruction and to utilize screening and progress monitoring data to drive their instructional decision making (Bender & Shores, 2007; Johnson et al., 2006; Noll, 2013; Mesmer & Mesmer, 2008). Bender and Shores (2007) indicate that all students benefit from RTI implementation because it moves educators away from "business as usual" and will "result in increased understanding of the academic skills of each student" (p. 67). Bender and Shores (2007) state,

> We should focus on the benefits of RTI for all children in our classes. RTI is, in effect, one of the best instructional practices we can implement for our students.

> Implementation of RTI will enhance learning across the board in our classes, and ultimately benefit all of the students whom we serve. (p.viii)

These benefits are fully realized when educators are able to match instruction with student need. As noted by Mellard et al., "Optimal learning outcomes occur when students' skills and abilities closely match the curriculum and instruction within the classroom. When a mismatch occurs, student outcomes and learning suffer" (2006, p. i.2). RTI implementation forces educators to more closely examine this connection between curriculum and instruction and student need.

RTI's early identification and intervention benefits students by providing the help struggling students need as soon as the skill deficit is identified through screening, instead of waiting for a pattern of failure. This early identification can avoid complications for students, such as negative changes in self-concept or efficacy that can develop if they experience repeated failure (Mellard & Johnson, 2008). This concept of early identification and intervention is especially critical when utilizing RTI as a method to identify students with a SLD rather than using the Discrepancy Model. NASDSE (2007a) described the Discrepancy Model as, "an antiquated model that waits for a child to fail, instead of a model based on prevention and intervention" (p. 12). In fact, early identification and intervention has shown in the research to "produce meaningful, sustainable gains in cognitive, social, and emotional development for high-risk students" (Neuman, 2007, p. 16).

When examining the benefits of RTI in relation to special education identification, many experts believe that RTI should decrease and stabilize the number of students identified as learning disabled (Bender & Shores, 2007; Johnson et al., 2006; Bender & Shores, 2007; Brown-Chidsey, 2007; Hughes & Dexter, n.d.). Studies have shown that RTI implementation over time can reduce the total number of students identified as learning disabled and improve learning outcomes for at-risk students (Brown-Chidsey, 2007). Besides general over identification into

special education, RTI also has the potential to address the disproportionality issues related to the Discrepancy Model. Hughes and Dexter note several aspects of RTI that can address disproportionality:

> (1) Assessment instruments used in RTI (e.g., curriculum-based measures) are nonbiased versus other forms of assessment. (2) All students receive effective instruction and thus most students, including minorities, will progress satisfactorily. (3) Instructional decisions (e.g., movement to or from a tier) are based solely on academic performance. (4) If, after receiving Tier 1 instruction, more minorities are identified as being at risk (based on universal screening data) than majority students, the instruction will be evaluated and modifications will be made to the core program. (5) Providing more intensive instruction in Tier 2 will result in fewer students moving into special education. (n.d., p. 3-4)

With some studies showing that as high as 80% of the students that were previously identified as learning disabled with the Discrepancy Model were mistakenly over identified, especially minority students, RTI's focus on high quality instruction at Tier I, early identification of the learning struggles, and early intervention could have mitigated much of this over identification (S. Shultz, personal communication, September 25, 2006). NASDE supported this idea in a 2007b statement, "Not only has research suggested that response to intervention does not lead to gender and ethnic biases, using this approach to diagnosing LD can actually reduce existing disproportionate representation of ethnic minorities in special education" (p. 25). However, to fully realize the benefits of RTI, educators must accept the ownership of *all* students and more effectively collaborate across departments to meet the needs of all students. Ehren (2013) noted,

> One advantage of RTI that is often noted is the fact that, if done well, it leads educators away from operating within the "silos" of general education, special education, and compensatory education and toward a more integrated system of meeting all students' needs. (p. 452)

Schools will not achieve the full benefits of RTI until these silos are broken down and a culture is created that each educator is responsible for *all* students and that *all* students can and will learn

given the right amount of time and support. Therefore, eliminating these naturally existing school silos highlights the complexity of successful RTI implementation (Brown-Chidsey, 2007; Mellard & Johnson, 2008; Ehren, 2013; Noll, 2013; Fuchs, Fuchs, & Vaughn, 2008).

## The History and Support for RTI in Federal Policy to Change Special Education Identification Procedures

Many educators across the country believe that the concepts and components behind RTI coming out of the language from IDEA 2004 and NCLB are relatively new. However, RTI practices were first examined in two separate studies in 1977. The first study, conducted by Deno and Mirkin, used curriculum-based measures to assess students' reading skills. Goals were established for the struggling readers, the students received small group instruction based on the goals, and received follow-up assessments utilizing the same curriculum-based measures. In the same year, Bergan applied RTI practices to students with behavioral issues. A behavioral problem-solving process was utilized to set goals and establish interventions for the identified students (Shores & Chester, 2009).

The U.S. Department of Education's 1977 definition of a learning disability as "a severe discrepancy between achievement and intellectual ability" (U.S. Department of Education, 1977, p. G1082) created the practice of utilizing IQ and achievement tests to determine if a discrepancy between intellect and achievement existed to identify a student as LD (Mesmer & Mesmer, 2008). This definition and practice for identifying students with learning disabilities created the growing controversy around identification and disproportionality that led to the RTI movement. As pointed out by Vaughn, Linan-Thompson, and Hickman (2003), "The identification of students with learning disabilities (LD) has increased more than 200% since 1977. Discrepancy between IQ and achievement as a means of identifying students with LD has been central to the

controversy of over identification" (p. 391). This over identification of minority students reached the U.S. Court of Appeals in the 1984 *Larry P. v. Riles* case. In this case the courts determined that minority students were over-represented in special education in California. The courts identified the use of IQ tests to diagnose mental retardation as a direct link to this problem (NASDSE, 2007b).

This growing problem of over identification of minority students and dissatisfaction with utilizing the discrepancy between IQ and achievement as a mean to identify students with special needs, led to several research and policy reports that supported the move to RTI. The following section highlights these key research and policy reports.

**National Institute for Child Health and Development (NICHD) Studies**

Founded in 1965, the NICHD has conducted and supported numerous research studies to answer three driving questions: (1) How do children learn to read?, (2) Why do some children and adults have difficulties learning to read?, and (3) How can we help most children learn to read? (Lyons, 1999). Since 1985 the NICHD has conducted ongoing studies to develop and support early identification procedures to identify struggling readers in kindergarten and first grade. The NICHD's research concluded that the use of the IQ/achievement discrepancy model delayed identification and treatment of students with reading difficulties beyond the time when the interventions were the most successful (NASDSE, 2007a).

**National Reading Panel (NRP)**

The National Reading Panel was established in 1997 after Congress directed the NICHD to review the research and identify how students learn to read. In April 2000, the NRP released its report identifying the essential components of reading instruction. This report spawned a considerable amount of research around the multi-tiered model of service delivery that RTI is

based upon by researchers such as Sharon Vaughn and Fuchs and Fuchs (Shores & Chester, 2009).

**National Research Council Panel on Minority Overrepresentation**

There were two noteworthy reports released by the National Research Council Panel on Minority Overrepresentation. The first study by Heller, Holtzman, and Messick in 1982 introduced the idea of utilizing response to intervention as a means to determine eligibility for special education. Heller, Holtzman, and Messick (1982) argued that special education identification should be based on three criteria: (1) if the quality of instruction in the general education setting was adequate, (2) if the special education program was appropriate and improved outcomes, and (3) if the evaluation system was valid and meaningful.

According to NASDSE (2007a), a 2002 report from the National Research Council Panel on Minority Overrepresentation, "Emphasized prevention and early identification/intervention to prevent or mitigate the effects of risk conditions that make disability identification more likely for poor and minority children and youth" (p. 11). The 2002 report also recommended an alternative model for identification of students with specific learning disabilities that examined: (1) classroom performance measures that were largely different than their peers, (2) low response rates to interventions implemented with fidelity over a several week period, (3) documented low performance in the general education setting, (4) documented need for specialized instruction in a special education setting, and (5) documentation that there was an opportunity to learn in the general education setting and that other sensory impairments and disabilities were absent (NASDE, 2007a).

### The President's Commission on Excellence in Special Education

In 2001 The Commission on Excellence in Special Education was established by President George W. Bush. The commission's report recommended the use of early intervention and assessment practices and changing the eligibility criteria for LD identification from the discrepancy model to the RTI model (Bender & Shores, 2007; Shores & Chester, 2009). The commission's report was noteworthy in beginning to change the mindset about special education across the country. As pointed out by NASDSE (2007a),

> The President's Commission on Excellence in Special Education (PCESE) report had three major recommendations: (1) Focus on results – not on process; (2) Embrace a model of prevention, not a model of failure; and (3) Consider children with disabilities as general education children first. (p. 12)

### National Summit on Learning Disabilities

The National Summit on Learning Disabilities was a two-day meeting sponsored by the U.S. Department of Education's Office for Special Education Programs (OSEP) that focused on identifying alternatives for SLD identification. The findings from the summit were published by Bradley, Danielson, and Hallahan in 2002. The findings supported the move to RTI to meet the eligibility criteria for LD identification. Specifically, the report stated:

> Response to quality intervention is the most promising method of alternative identification and can both promote effective practices in schools and help to close the gap between identification and treatment. Any efforts to scale up response to intervention should be based on problem-solving models that use progress monitoring to gauge the intensity of intervention in relation to the student's response to intervention. (p. 798)

### No Child Left Behind (NCLB)

The two federal policies that had the most significant roles in opening the doors for RTI as educational reform and a means to identify students with specific learning disabilities were the

No Child Left Behind Act (NCLB) of 2001 and the reauthorization of the Individuals with Disabilities Education Act in 2004 (IDEA 2004). As noted by Mellard and Johnson (2008),

> NCLB 2001 legislated significant changes in standards for schools that focus on accountability for every student's progress, ensuring that students are taught by highly qualified teachers, proving that programs are successful based on scientifically based research, and creating a system fully aligned with state learning regulations. (p. 15)

Two key elements that came out of NCLB that are related to RTI are the requirement for scientifically, research-based strategies, which is mentioned at least one hundred times in the Act, and in the Reading First program documentation. As noted by Shores and Chester (2009), "This requirement for scientific, research-based strategies would become central to future development of pyramids of interventions" (p.3). A basic expectation for RTI implementation is that both the core curriculum utilized in Tier 1 and any interventions utilized within Tiers 2 and 3 are research or evidence based (Johnson et al., 2006; Lembke et al., 2010; Mellard & Johnson, 2008; Bender & Shores, 2007; NASDSE, 2007a; Shores & Chester, 2009). Reading First was designed to ensure that all students were reading at or above grade level by the end of third grade (Mellard & Johnson, 2008). Hall (2008) noted the compatibility between Reading First and RTI, "Reading First regulations embody the same principles as RTI, including screening, assessment, and tiers of instruction" (p. 30). Early identification and intervention is another key aspect of Reading First that directly relates to the philosophies of RTI. Reading First emphasizes this through the requirement to "select instructional and assessment tools and practices that have been determined to be effective with students at risk for early reading failure" (Mellard & Johnson, 2008, p. 18).

**The Individuals with Disabilities Act**

The Individuals with Disabilities Education Act (P.L. 94-142) was first enacted in 1975 "to provide a free and appropriate public education for students with disabilities" (NASDSE,

2007a, p. 15). This initial law also included a "child find provision", to find and identify students with disabilities. The act was so successful in its identification of students that many states began to implement funding and identification restrictions on special education students.

The first major reform of P.L. 94-142 came in 1997. One of the most important changes that came out of IDEA '97 was a change in mentality that special education was a set of services, not a place (NASDSE, 2007a). IDEA '97 also began to focus more on accountability for student outcomes and performance, and provided LEA's with more flexibility on the use of assessments. "LEA's were now encouraged to use a variety of assessment tools and strategies to gather relevant functional and developmental information" (NASDSE, 2007a, p. 16) when determining a child's eligibility for special education. IDEA '97 laid the foundation for the RTI language that appears in IDEA 2004 (NASDSE, 2007a).

In November of 2004, substantial changes were made to IDEA that set the stage for the use of RTI to identify students with specific learning disabilities. IDEA 2004 continues the practice that was written into its original language that forces case conference committees to explore lack of instruction prior to identifying a student with a learning disability. IDEA 2004 states:

> In making a determination of eligibility under paragraph (4)(A), a child shall not be determined to be a child with a disability if the determinant factor for such determination is-(A) lack of appropriate instruction in reading, including the essential components of reading instruction. (20 U.S.C.1414(b)(5)(A))

This language forces educators to fully examine their core curriculum and professional development practices to ensure that all students are receiving high quality instruction at Tier 1 and shifts this responsibility from the student to the educators.

IDEA 2004's primary impact on RTI was language that gave LEA's flexibility in using RTI practices to identify students with specific learning disabilities and discouraging the sole use of the discrepancy model. IDEA 2004 states:

> When determining whether a child has a specific learning disability as defined in section 602, a local education agency shall not be required to take into consideration whether a child has a severe discrepancy between achievement and intellectual ability in oral expression, listening comprehension, written expression, basic reading skills, reading comprehension, mathematical calculation, or mathematical reasoning. (20 U.S.C.1414(b)(6)(A))

IDEA 2004, as an alternative, allows LEA's to use "a process that determines if the child responds to scientific research-based intervention as part of the evaluation procedures" (NASDSE, 2007a, p. 17). The IDEA language does not require the use of RTI, but does give LEA's that flexibility. IDEA 2004 also includes language related to RTI assessment practices, especially progress monitoring. Regardless of the method LEA's select to identify students with a SLD, IDEA 2004 requires the case conference committee to consider, "data-based documentation of repeated assessments of achievement at reasonable intervals, reflecting formal assessment of student progress during instruction" (§ 300.309[b][2]) when determining eligibility (Zirkel & Thomas, 2010, p. 60).

Finally, IDEA 2004 provides additional support for early identification and intervention by allowing an LEA to utilize up to fifteen percent of its IDEA Grant funds for early intervention education services for students not receiving services from special education (NASDSE, 2007a). This allows districts flexibility in utilizing IDEA funds and staff to provide services to students in general education that need academic or behavioral support.

There are similarities to NCLB and IDEA 2004. Both stress the use of scientific, research based instructional and intervention strategies, as well as early identification and intervention services to reduce the number of students requiring special education (NASDSE,

2007a). However, as pointed out by Davies and Walker (2012), "the word *intervention* is never connected to scientifically based research in NCLB" (p. 69). NCLB's definition focuses more on the identification and delivery of the core curriculum at grade level while IDEA focuses the definition on the interventions utilized for early intervening services. Table 2.1 by Mellard and Johnson (2008) provides a visual comparison of the three primary federal acts that have impacted the implementation of RTI: NCLB 2001, Reading First, and IDEA 2004. Although each separate act had its own specific purpose, they all influenced the movement to RTI through the integration of research or evidence based instructional practices and formative assessments to drive the decision-making process for struggling students.

**Table 2.1:** ***Crosswalk of RTI, NCLB 2001, Reading First, and IDEA 2004***

| | *RTI* | *NCLB 2001* | *Reading First* | *IDEA 2004* |
|---|---|---|---|---|
| *Statement of Purpose* | Provides a schoolwide model of integrated instruction, assessment, and date-based decision making to improve student outcomes. | Requires that all students reach high standards in reading, writing, and math and graduate from high school. | Focuses on increased reading achievement for students in grades K-3. | Improves educational outcomes for students with disabilities. |
| *Instructional Program Coherence* | Requires both horizontal and vertical alignment of instructional practices, screening, and monitoring. | Requires an integrated instruction and assessment system.<br><br>Requires assessment of student progress in the state curriculum. | Requires the use of scientifically based instruction and assessment in the essential components of reading from grades K-3, including supplemental support for students with reading difficulties. | Requires the use of research-based interventions, progress monitoring, accountability, and access to the general curriculum, as well as alignment of transition services with |

| | | | | |
|---|---|---|---|---|
| | | | | post-school opportunities. |
| *Building Capacity* | Focuses on schoolwide systems requires greater collaboration of teachers and staff to collaborate efforts of instructional delivery, assessment, and decision making. | Requires data collection and evaluation to determine adequate yearly progress.<br><br>Requires that teachers be highly qualified. | Emphasizes capacity building through its focus on procuring instructional materials and providing professional development for K-3 teachers in the essential components of reading instruction. | Encourages capacity building through the inclusion of an early-intervening services provision that includes providing interventions to students at risk and related professional development for teachers. |

*Note:* retrieved from Mellard & Johnson, 2008, p. 20

**National Joint Committee on Learning Disabilities**

In 2005, the National Joint Committee on Learning Disabilities released recommendations to guide the development of procedures to further define the flexibility LEA's were given in IDEA 2004. Those recommendations include:

> (1) Decisions regarding eligibility for special education services must draw from information collected from a comprehensive individualized evaluation using multiple methods, including clinical judgment and other sources of relevant information. (2) Students must be evaluated on an individual basis and assessed for intra-individual differences in the seven domains that comprise the definition of SLD in the law: listening, thinking, speaking, reading, writing, spelling, and mathematical calculation. (3) Eligibility decisions must be made through an interdisciplinary team, must be student centered and informed by appropriate data, and must be based on student needs and strengths. (4) As schools begin to execute a process of decision making that is more clinical than statistical in nature, ensuring through regulations that this team of qualified professionals represents all competencies necessary for accurate review of comprehensive assessment data will be critical. (Johnson et al., 2006, p. i-2 - i-3)

Although RTI has gained considerable momentum in federal policy and LEA practices across the country as an alternative means to identify SLD students, more research in needed in this area. Research has shown that the discrepancy model was inconsistently implemented. As noted by NASDE (2007b),

> Children identified as LD in one state may not be diagnosed in another. Even more alarming are the inconsistencies found within one state in that a child diagnosed in one district might not meet eligibility criteria in another district, even though both were in the same state. (p. 3)

This certainly calls into question the reliability of the traditional practices in identifying students with SLD. However, more research also needs to be conducted in the use of RTI as an identification procedure. "A number of studies have been conducted that strongly support RTI as an essential instructional model that benefits children by addressing academic difficulties. To date, no controlled studies have been conducted on how RTI works for SLD identification" (Davies & Walker, 2012, p. 68-69). Table 2.2 by NASDE (2007a) provides a comparison between the traditional discrepancy model and RTI in SLD determination. The table clearly highlights the dramatic differences between the discrepancy model and RTI, especially the limiting natural of the old model in the number of assessments considered and its relationship to the curriculum and interventions compared to RTI.

**Table 2.2:** ***Similarities and Differences in Eligibility Determination of Historical and RTI Practices***

| *Component* | *Historical System* | *RTI* |
|---|---|---|
| LD eligibility criteria | Primarily based on ability-achievement discrepancy and consideration of SLD exclusion factors | Based on significant difference in performance compared to peers, low rate of progress even with high-quality interventions, special education need, consideration of SLD exclusion factors |
| Type of tests used | Global – ability and achievement tests, usually published | Specific – usually direct measures of specific skills needed for success in the classroom; may be published or unpublished |
| Comparison standards | Typically, national norms | Typically, regional, district, school, or classroom standards; nationally normed tests used sparingly |

| | | |
|---|---|---|
| Frequency of assessment | Typically administered at one or two sittings | Functional academic and/or behavioral data are collected over time |
| Nature of assessment targets | Presumed hypothetical constructs that have indirect or general relationships with classroom academics or behavioral problems (e.g., IQ, visual-motor integration, psychological processing, IQ-achievement discrepancy); assessment targets most often intrinsic to the person | Very specific skills are measured (e.g., phonemic awareness, reading fluency, monitoring meaning while reading, math computation); assessment targets most often related to what a person does (skills and performances) |
| Relationship of assessment instruments to general curriculum | Usually minimal | Direct relationship |
| Relationship between eligibility assessments and intervention | Often little demonstrable relationship between assessments and effective interventions | Usually a direct link between assessed performance and instructional intervention |
| Use of information provided by parents and teachers | Typically, supplemental to the eligibility decision | Typically, central to the eligibility decision |

*Note*: Retrieved from NASDE, 2007a, p. 31

## Essential Components and Procedures of RTI

### RTI Models

There are primarily three models of RTI implementation: the Standard Treatment Protocol Model, the Problem-Solving Model, and a hybrid model that combines the previous two models. Each model will be briefly discussed in this section.

As noted by Bender and Shores (2007), the Standard Treatment Protocol Model is the preferred model of most researchers. The Standard Treatment Protocol Model utilizes universal screening assessments with expected performance benchmarks or standards to identify students with skill gaps. The identified students are then exposed to a pre-selected sequence of research-based interventions with frequent progress monitoring to determine the student's growth. The data is utilized to determine whether the student should continue with the current intervention or

move to a more intense intervention (Bender & Shores, 2007; Fuchs, Fuchs, & Vaughn, 2008). One key aspect of the Standard Treatment Protocol Model is that the interventions selected to address the skill gaps are interventions that researchers have validated as effective (Johnson et al., 2006; Mellard & Johnson, 2008). Thus, fidelity of implementation of these interventions is critical to its success. As noted by Johnson et al. (2006),

> Research for standard protocol interventions should specify the conditions under which the intervention has proven successful, including the number of minutes per day, the number of days per week, and the number of weeks (typically eight to twelve) required for instruction with the intervention (p. 315).

Bender and Shores (2007) recommend the following elements for a Standard Treatment Protocol Model:

> (1) A screening score indicating a potential problem; (2) A Tier One intervention data set indicating nonresponse or less than adequate response to Tier One intervention; (3) Observation notes indicating that the general education teacher implemented a scientifically based curriculum in Tier One with fidelity; (4) A Tier Two intervention data set indicating nonresponse or less than adequate response to a Tier Two intensive educational intervention; (5) Observational data indicating that an intensive research-based intervention was undertaken for the Tier Two intervention; and (6) A summary report of these basic elements and recommendations for further services for learning disabilities, if warranted by these data. After the Tier Two intervention is completed, a summary report should be completed, regardless of the eligibility determination. (p. 39)

The Problem-Solving Model also begins by utilizing a universal screening assessment to identify students with skill or behavioral gaps. However, once a gap is identified, a school based problem-solving team then meets to discuss the student. The team members analyze the assessment data and other evidence, establish a goal(s) for the student, develop interventions based on those goals that the general education teacher or interventionist implements, and monitor progress (Bender & Shores, 2007; Johnson et al., 2006; Fuchs, Fuchs, & Vaughn, 2008). As noted by Bender and Shores (2007),

> The basis for most versions of the problem-solving RTI model is a cyclical problem-solving process involving four steps. In each tier, a problem-solving team addresses the

> four steps and determines the best course of action for the student. In order to distinguish this cyclical problem-solving process from the problem-solving model of RTI, we have named the cycle "DPIE," relating to the four steps pf the cycle:
>
> *D* Define the Problem
> *P* Plan an Intervention
> *I* Implement the Intervention
> *E* Evaluate the Student's Progress. (p. 51)

Like with the Standard Treatment Protocol Model, decisions within the process should be data driven. However, the Problem-Solving Model is much looser in its overall design. In the Standard Treatment Protocol Model, students move through a preselected sequence of interventions: for a specific identified skill gap, all students receive intervention A, then B, and so on. The Problem-Solving Model is not as rigid. The problem-solving team decides or develops the intervention that is implemented on each student based on the student's needs. This also leads to the potential problems with this model. Teams may select or create interventions that are not research or evidence based, and the teacher implementing the intervention may not implement it with fidelity. As noted by Johnson et al. (2006),

> At this point, the evidence supporting these attributes is insufficient. Whereas problem solving has been shown to be a scientifically validated approach to help children with behavioral problems, the evidence is insufficient to show effectiveness for children with severe reading and math problems. (p. 3.15)

Table 2.3 highlights the general strengths and weaknesses previously discussed for the two primary models used for the implementation of RTI. RTI leadership teams need to explore these differences when designing a school-wide model for implementation.

**Table 2.3:** ***Strengths and Weaknesses of Problem-Solving and Standard Treatment Protocol RTI's***

| *Model* | *Strengths* | *Weaknesses* |
|---|---|---|
| Problem-Solving | • Decisions based on individual student needs<br>• Allows more flexibility in choices of interventions and allocation of resources | • Dealing with learner problems at an individual level can become time consuming<br>• Requires teachers and team members to have vast |

| | | |
|---|---|---|
| | • Studies support its effectiveness in dealing with behavioral problems | knowledge and expertise in research-based strategies<br>• No evidence of effectiveness in dealing with academic problems<br>• RTI problems-solving teams may select interventions that are not evidence or research-based<br>• May lack fidelity in the implementation of interventions |
| Standard Treatment Protocol | • Clear scientific process in literature for strategies and assessment<br>• Standard interventions in place and readily available to students in need<br>• Structured progression between tiers | • Less flexibility with choice of interventions (one size doesn't fit all)<br>• May require additional staff, depending on available resources |

*Note*: Adapted from Bender & Shores, 2007, p. 15

Some researchers, like Shores and Chaster (2009), advocate for a Mixed Method Model. In a Mixed Method Model, a school would utilize the Standard Treatment Protocol Model to address the common academic issues students face and utilize the Problem-Solving Model for more unique academic problems and for behavioral problems.

The third model is called the Hybrid Model. It combines the best features of both models. The Hybrid Model also begins with universal screening to identify academic or behavioral skill gaps. Once a gap is identified for a student and all Tier I interventions have failed to show adequate progress, the student is referred to a school based problem-solving team. The team discusses the student's data and other evidence and selects an intervention based on the student's needs. However, the difference is that the intervention is selected from a pre-identified menu of interventions. To be included in the list, the intervention has to be evidence or research based. There is not a preset sequence for the intervention like in the Standard Treatment

Protocol Model. The team selects which intervention they feel will meet the student's needs. The classroom teacher or interventionist implements the intervention and progress monitors the student's growth. The problem-solving team meets regularly to evaluate the student's progress and decide, based on the data, to continue, fade, or change the intervention.

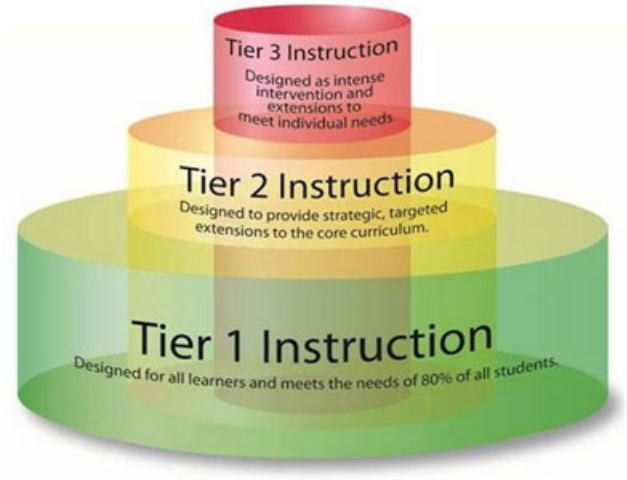
**Multi-Tiered System**

Another key component of RTI is the multi-tiered framework which organizes and systematizes the curriculum and interventions. The framework was based on a model that originally came from the public health sector. The public health/medical model is organized around multi-tiers of interventions that increase with intensity (i.e.: from primary care to intensive care or specialists) as a patient moves through the tiers (Mellard & Johnson, 2008). RTI is organized in a similar fashion. All students receive instruction and basic interventions in the core curriculum at Tier 1. Those students that struggle with various skills and concepts within the core curriculum receive additional support through interventions that increase in intensity and decrease in the number of students receiving the intervention as they move through the tiers. In RTI, models with three or four tiers are most common (NASDSE, 2007a; Mellard et al., 2010).

One key aspect of the framework is that it assists schools in allocating valuable and often limited resources in an efficient manner. Each tier has unique support structures and interventions delivered by trained staff members and/or specialized software to meet the specific needs of the students at that tier (NASDSE, 2007a). Progress monitoring is conducted on a regular basis at each tier to determine the effectiveness of the intervention and determine whether an intervention needs to be continued, faded, or changed. For the purpose of this study, I will focus on the commonly used three-tiered model for service delivery (Johnson et al., 2006).

Figure 2.1 comes from the Indiana Department of Education. The diagram is a visual representation of the three-tiered model and a modification of the typical RTI pyramid found in the literature. RTI is commonly represented by a pyramid with Tier 1 as the foundation or base of the pyramid. This is because Tier 1 instruction is designed for ALL students at grade-level and forms the foundation for learning. Tier 2 and 3, respectfully, make up the middle and top layers of the pyramid to represent more intensive interventions for a decreasing number of students (small groups at Tier 2 and individual students at Tier 3) who are not successful after Tier 1 instruction. Notice in the model how the colored sections representing the three tiers continue down through the other colors to represent the fact that each intervention is not done in isolation. A student receiving Tier 2 or Tier 3 interventions is also continually involved in instruction at Tier 1(core instruction for ALL students); thus, the red or yellow representing Tier 2 and 3 are also displayed inside the green Tier 1 section. It also represents the idea that a student's placement within a tier is not meant to be a permanent placement. In an effective RTI model, students move fluidly from tier to tier as their instructional or behavioral needs change (Mellard et al., 2010).

**Figure 2.1:** ***RTI Three-Tiered Model***




Indiana Department of Education
Three-Tier Instructional Model

**Tier 1: Primary Prevention**

Tier 1 is the core research-based curriculum in reading, mathematics, behavior, and other content areas that a general education teacher delivers to all students with fidelity. High quality curriculum and instruction on a daily basis to all students is the focus for Tier 1 and the biggest priority for schools within the RTI model. As noted by Noll (2013), "Thirty minutes of intervention can't make up for poor classroom instruction during the other five to six hours of the school day" (p. 57). If a school and teachers are utilizing research-based curriculum and instructional strategies followed with fidelity, at least eighty percent of the students should be successful at Tier 1. If more than twenty percent of students need additional interventions at Tier 2 or 3, a school needs to examine its curriculum and/or instructional strategies (NASDE, 2007a). Therefore, to be efficient and effective with limited resources, a school or district should place most of its time and efforts on strengthening the core curriculum and instruction at Tier 1 to reduce the number of students requiring Tier 2 or 3 services due to ineffective Tier 1 instructional strategies or misaligned curriculum, or as Johnson et al. (2006) refer to as reducing the incidences of "instructional casualties".

A major component of Tier 1 is universal screening. During Tier 1 instruction, a school utilizes universal screening assessment tools, such as DIBELS, NWEA, Acuity, STAR Reading, or STAR Math, three or four times a year to monitor students' performance on key academic or behavioral areas, skills, or standards (NASDE, 2007a). Individual teachers, grade-level teams, and departments analyze the screening data to monitor student performance and identify the areas for whole class interventions and small groups of students that may need basic interventions at Tier 1 or that may require more targeted interventions at Tier 2. As noted by

Johnson et al. (2006), "Screening is important as it represents the first gate or entry into subsequent tiers of RTI instruction" (p. 1.4).

One basic expectation at Tier 1 is that instruction is differentiated to meet the needs of all students (Johnson et al., 2006). Universal screening data and ongoing classroom formative assessments assist teachers in identifying students that need differentiated instruction at Tier 1. Once identified, the general education teachers at Tier 1 implement basic whole group or small group interventions to support the academic or behavioral needs of the students. At Tier 1, this can take the form of a differentiated assignment or project, additional Guided Reading groups, or small group instruction on a specific mathematics skill. Differentiation of instruction and small group intervention at Tier 1 are designed to be "proactive and preventative" in nature to reduce the number of students needing more targeted interventions at Tier 2 (Johnson et al., 2006).

**Tier 2: Secondary Prevention**

Tier 2 is supplemental instruction/intervention designed to meet the needs of the students showing a poor response, academically or behaviorally, to the whole group and differentiated instruction at Tier 1 (NASDSE, 2007a). Tier 2 support should be provided at an increased level of intensity, and always in addition to instruction at Tier 1 (Mellard, McKnight, & Deshler, 2007). The level of intensity can be increased in Tier 2 by decreasing the number of students receiving the small group instruction or by increasing the amount of time the student(s) receive instruction (Fuchs et al., 2008). As noted by Mellard and Johnson (2008), "Tier 2 forms the school's first line of defense for reducing the number of students who are low performing or inappropriately referred for special education" (p. 79).

In Tier 2, teachers meet in grade-level or department teams, or in some cases problem-solving teams, to analyze the universal screening data from Tier 1 assessments. The teacher or

team identifies small groups of students responding poorly to the Tier 1 instruction. The teacher or team then determines the best Tier 2 intervention, typically a Standard Treatment Protocol, for the small group(s) of students. Tier 2 interventions are typically provided within the general education setting by the classroom teacher. In some cases, a school may have the resources to provide the Tier 2 interventions through a reading specialist or interventionist (Mellard et al., 2007). Regardless of who delivers the intensive instruction to these small Tier 2 groups, ideally the groups consist of no more than one adult instructing two or three students (Fuchs & Fuchs, 2005).

At Tier 2, the teacher or interventionist delivering the small group intervention begins the process of progress monitoring. "Progress monitoring is a set of assessment procedures for determining the extent to which students are benefiting from classroom instruction/intervention and for monitoring effectiveness of curriculum" (Johnson et al., 2006, p. 2.1). The teacher begins to closely monitor and chart the students' progress utilizing short, repeatable, skill-specific probes, such as DIBELS (Mellard et al., 2007). Researchers differ on the timeframe for progress monitoring. Fuchs and Fuchs (2005) suggest that Tier 2 progress monitoring should occur weekly. However, Vaughn, Linan-Thompson, and Hickman (2003) recommend progress monitoring twice a month at Tier 2.

Initially, researchers such as Vaughn et al. (2003) indicated that students should remain in Tier 2 interventions for a period of six to eight weeks prior to determining progress. When it comes to making a decision on whether to continue, fade, or change an intervention, Bender and Shores take a different stance. Bender and Shares (2007) state,

> The number of weeks of intervention is not as critical as the number of data points on which one's decisions are based, so the length of time in Tier Two is related to how frequently Caleb's reading progress is monitored. (p. 30)

Whether RTI teams are factoring in the number of weeks in an intervention or the number of data points, data-based decision making becomes a key factor in Tier 2. Based on the student's data, the team decides the next steps for the student. If he/she has made sufficient gains, the student returns to Tier 1. If the student is still responding poorly, the team must decide whether the student needs more time at Tier 2 or more intensive and individualized support at Tier 3.

**Tier 3: Tertiary Prevention**

The multi-tiered model for delivery of services is designed to increase the intensity of the intervention and decrease the number of students served as they move up the tiers. While Tier 1 is designed to meet the needs of *all* students and Tier 2 is designed to meet the needs of *some* of the students not successful at Tier 1 in small group settings, Tier 3 is designed to meet the challenging needs of a *few* individual students with the most intensive interventions (Mellard et al., 2010; Mellard et al., 2007). Although Tier 3 is designed for the most intensive interventions, it should also provide flexible services. Students should be allowed to move in and out of Tier 3 as his/her instructional needs change through the course of the year (Johnson et al., 2006).

Individual students identified through progress monitoring as non-responders at Tier 2 should be referred to one of the building's multidisciplinary RTI teams. After analyzing the student's data, intervention history, strengths, and concerns, the team selects the most appropriate Tier 3 intervention to meet the student's skill deficit and decides which staff member should deliver the services. At Tier 3 the interventions are typically delivered outside of general education through Title I services, trained interventionists, or by special education teachers (NASDSE, 2007a). The individual student then receives an intervention increased in intensity. By decreasing the group size or by varying the dosage of three key elements, the intensity of the

intervention can be increased at Tier 3 (Fuchs et al., 2008; Mellard et al., 2010). As noted by Mellard et al. (2010),

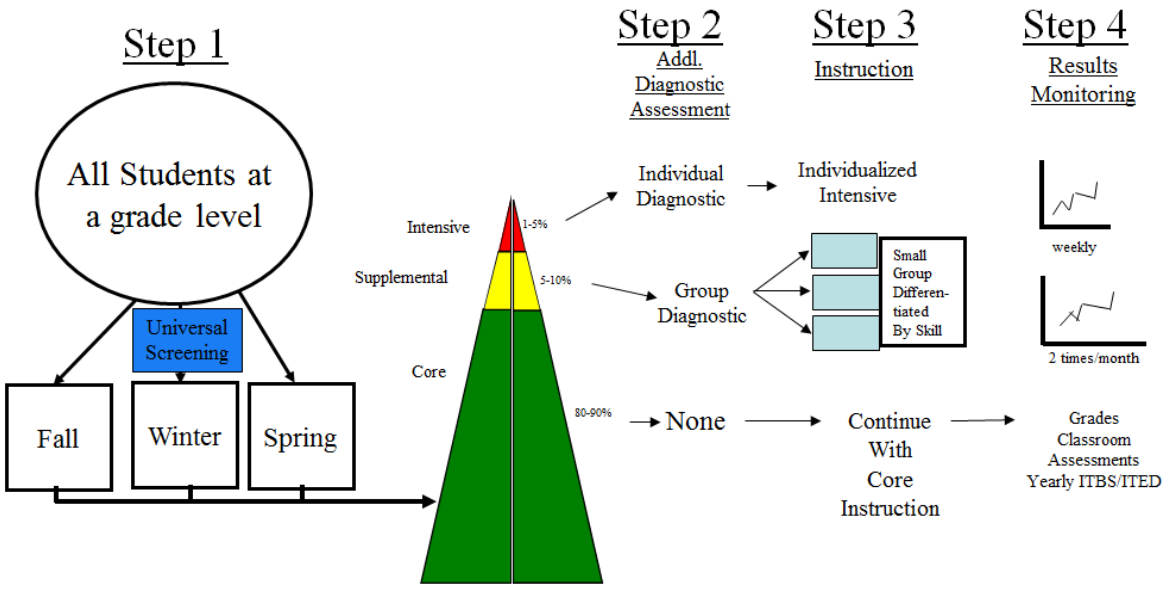
> To increase instructional intensity by varying dosage, teachers may change three key time-related variables: (1) the instructional minutes given to each student (i.e., minutes per lesson); (2) the frequency of the instruction (i.e., tutoring sessions per week); and/or (3) duration of the instruction (i.e., number of weeks). (p.219)

At Tier 3, individual diagnostic assessments/progress monitoring continues more frequently (daily to weekly) to assess the growth of the student and the effectiveness of the intervention (NASDSE, 2007a; Mellard et al., 2007). The multidisciplinary team utilizes progress monitoring data to understand the success of the intervention or if the student needs to be considered for special education services. If the student is still non-responsive to the Tier 3 intervention, he/she may have a learning disability and qualify for services through special education, which is considered the most intensive level of intervention (Mellard et al., 2007; NASDSE, 2007a).

Figure 2.2 is a model developed by George Batsche in 2007 to illustrate the steps and level of services provided in a multi-tiered model. Step one indicates the core instruction and universal screening that occurs at Tier 1. In step one, all students are benchmarked with a universal screening assessment three times a year, typically early in the fall, mid-year or winter, and then again in the spring. The green, yellow, and red pyramid then represents the three tiers of services and the approximate percentage of students that should be serviced at each level based on the universal screening results. Step two represents the type of progress monitoring or diagnostic assessments that should occur within the Tier: individual or small group. Step three represents the size of the instructional groups for each tier, and step 4 represents the frequency of progress monitoring. Tier 3 should service one to five percent of a building's most struggling students. As displayed in figure 2, Tier 3 students should receive individual diagnostic

assessments to determine which individualized intensive intervention will best serve the student's needs. Finally, in step four, the student should be progress monitored a minimum of once a week.

**Figure 2.2:** ***Steps and Levels of Service in a Multi-tiered Model***




Batsche, 2007

**An Integrated Data Collection/Assessment System to Aid Data-Based Decision Making**

Another essential element of RTI is the ability to inform data-based decision making throughout the three tiers through an integrated data collection and assessment system (NASDSE, 2007a). At Tier 1, school-wide or universal screening assessments are utilized three times a year (beginning, middle, and end) to assess all students on key academic or behavioral standards. As noted by Johnson et al. (2006), these assessments are "characterized by providing quick, low-cost, repeatable testing of age-appropriate critical skills or behaviors" (p. 1.2). Universal screening data are utilized by building leadership teams and departments to determine the effectiveness of the core curriculum and instruction, and to determine what students need additional differentiation and support at Tier 1 or more intensive support at Tier 2. Although

highly recommended for the reasons listed above, there are no laws or regulations that mandate universal screening (Wixson & Valencia, 2011).

During Tier 2 and Tier 3 interventions, students are regularly progress monitored. Progress monitoring utilizes short, repeatable probes that are sensitive to small measures of growth. Progress monitoring data are utilized to determine the effectiveness of the intervention and eligibility for special education (NASDSE, 2007a; Johnson et al., 2006; Mellard & Johnson, 2008; & Mellard et al., 2007). In determining eligibility for a specific learning disability, IDEA 2004, which authorized RTI, states that the case conference committee must consider "data-based documentation of repeated assessments of achievement at reasonable intervals" (§ 300.309[b][2]). These assessments would include both the universal screening and progress monitoring data from the RTI process.

When determining the types of assessments a school or district wants to utilize to drive this type of decision making, NASDSE (2007a) recommends that the assessment systems have nine characteristics:

> (1) Directly assess the specific skills embodied in state and local academic standards; (2) assess "marker variables" that have been demonstrated to lead to the ultimate instructional target (e.g., reading comprehension or number sense); (3) are sensitive to small increments of growth over time; (4) can be administered efficiently over short periods; (5) may be administered repeatedly (using multiple forms); (6) are readily summarized in teacher-friendly data displays; (7) can be used to make comparisons across students; (8) can be used to monitor an individual student's progress over time; and (9) have direct relevance to the development of instructional strategies that address the area of need. (p. 25-26)

Once the assessments systems are selected, it is critical that all staff members that will be delivering the assessment and/or interpreting the data are adequately trained (Johnson et al., 2006; Foorman, 2007; O'Conner & Freeman, 2012; Wixson & Valencia, 2011). The building's leadership team or multidisciplinary RTI teams must also decide on the frequency of the

assessments. Figure 2.2 by Batsche can assist teams in determining which assessment is appropriate at each tier and how often the students should be progress monitored.

## Monitoring for Fidelity

Monitoring for fidelity, sometimes called treatment or implementation integrity, is the process of directly and indirectly monitoring the implementation of all aspects of the RTI process to ensure implementation as designed or intended. In the RTI process, this involves monitoring several different components, including: delivery of core curriculum and instruction, delivery and scoring of universal screening assessments, selection and delivery of interventions, delivery and scoring of progress monitoring assessments, and data-based decision-making procedures within the RTI teams (Keller-Margulis, 2012; Mellard & Johnson, 2008; NASDSE, 2007b; Mellard et al., 2007). RTI by nature is a very complex, multilayered system that requires effective collaboration across numerous staff members and even departments within a school. To effectively and efficiently implement RTI and reap its full benefits on student achievement, all of these components and procedures must be frequently monitored for fidelity, which is considered one of the best practices of RTI implementation (Johnson et al., 2006; Keller-Magulis, 2012; NASDSE, 2007b). As noted by Mellard and Johnson (2008, p. 126), "Fidelity of implementation is arguably the most important component of an RTI process because it serves as the means by which a school can evaluate and respond to professional development needs, resource acquisition and distribution, and infrastructure development."

To truly govern the effectiveness of RTI implementation, a school must create and implement a procedure or system for monitoring fidelity. Keller-Margulis (2012) recommends developing a system that collects direct and indirect data around three broad domains: assessment practices, instruction and intervention delivery, and procedural decision-making.

Both direct and indirect data should be collected on all domains. Direct monitoring of fidelity typically involves an observation of the procedure by a trained staff member. Indirect monitoring can include review of documents or products (samples of student work or assessment results), self-reporting, rating scales, checklists, or interviews (Keller-Margulis, 2012; Mellard & Johnson, 2008).

Universal screening and progress monitoring assessments must be administered, scored, and analyzed correctly to determine students' instructional needs. The proper delivery, scoring, and analysis of the assessment data will determine if additional instruction needs to occur on a particular standard or if a student needs a more intensive intervention to close a skill gap. Besides initially providing professional development and technical support, schools must then directly monitor the administration of the various assessments for fidelity. For example, the following questions may help the RTI leadership team examine assessment fidelity:

- Was the assessment administered correctly?
- Did the teacher provide the appropriate amount of support during the assessment?
- Were the directions clearly communicated to the students?

In addition, schools should indirectly monitor fidelity of the assessments through practices such as periodically and randomly checking the scoring of the screening assessments or progress monitoring probes (Keller-Margulis, 2012).

School leaders and RTI teams should also monitor the fidelity of instruction and interventions at scheduled and unscheduled time throughout the school year (Keller-Margulis, 2012). At Tier 1, school leaders need to monitor if teachers are implementing the core curriculum with fidelity. Leadership teams should consider the following questions:

- Are the standards being taught in the desired order and to the desired depth?

- Is there vertical and horizontal alignment with the standards?
- Are teachers utilizing research or evidence based best practice instructional strategies during instruction?
- Are teachers differentiating instruction?

At Tiers 2 and 3, school leadership teams need to monitor if the selected interventions are being delivered with fidelity by asking question such as:

- Was the correct intervention selected?
- Is the teacher implementing the intervention as intended?
- Is the recommended frequency and duration being followed for the selected intervention?
- Is anecdotal and progress monitoring data being collected during the intervention?

As noted by Mellard and Johnson (2008), monitoring the effectiveness and delivery of an intervention is critical to determine if the gains in student achievement can be accurately attributed to the intervention and that the intervention and positive results can be replicated on other students.

Finally, RTI is a data-based decision-making process. Decision-making rules and procedural guidelines are developed for individual teachers, grade level teams, departments, RTI teams, and Case Conference Committees throughout the entire process covering all three tiers, including the potential identification of a specific learning disability. Throughout the process, trained staff members and school leaders should monitor that these established decision-making rules and procedures are being followed with fidelity (Keller-Margulis, 2012).

One of the most critical aspects of monitoring for fidelity is providing those implementing the assessments, instruction, or interventions and making the key decisions with available data clear and immediate feedback (Keller-Margulis, 2012). As noted by Keller-

Margulis (2012), "Data collected through a fidelity system about the implementation of RTI can have no positive impact in implementation without being shared with those individuals working within the system" (p. 350). When teachers are involved in the development of the fidelity monitoring system and immediate feedback is provided throughout the monitoring process, the results have indicated that teachers, support staff, and school leaders can maintain high levels of fidelity of RTI implementation in assessments, instruction, interventions, and decision making (Keller-Margulis, 2012).

## Professional Development

RTI, with its numerous interrelated components, is a complex early identification and early intervention model that requires ongoing, job-embedded professional development in order to implement with fidelity and reap the full benefits on student achievement (Castro-Villarreal, Rodriquez, & Moore, 2014; Neuman, 2007; Vaughn & Linan-Thompson, 2003; Foorman, 2007; O'Conner & Freeman, 2012; Mellard et al., 2010; Hall, 2008). As noted by Fuchs, Fuchs, and Vaughn (2008), "High-quality classroom reading instruction has many dimensions, but none is more important than a well-prepared teacher" (p. 110). When teachers are provided with ongoing professional development, this gain in teacher knowledge is significantly related to gains in student achievement (Foorman, 2007). However, due to its complex nature, schools and districts need to develop a comprehensive professional development plan for RTI that not only covers a basic understanding of RTI, but also includes training sessions on specific components and follow-up coaching to support implementation of those components. Table 2.4 shows the various training components that need to be considered in the school's or district's plan for different groups involved in the implementation of RTI, including administrators, teachers, RTI coordinators, support staff, and parents.

**Table 2.4:** ***Training Considerations for RTI Implementation***

| **Training Considerations for RTI Implementation** | |
|---|---|
| **Training Groups** | **Professional Development Topics** |
| All Groups | Understanding the "why" behind and need for RTI |
| | The multi-tiered model that will be utilized within the school or district – how many tiers and criteria for moving between tiers |
| | Technology and other related supports |
| Administrator | National, state, and local RTI policies and practices |
| | Best practices and models for delivering professional development |
| | Staffing and budgeting requirements for RTI |
| | Staffing structures for delivering interventions within the tiers |
| | Technology needs for implementation and sustainability of the model |
| | Skills and structures for data-based decision-making; How to conduct grade-level or departmental data meetings |
| | Validating and strengthening Tier 1 core instruction; research and evidence-based instructional strategies |
| | Developing an assessment plan – universal screening & progress monitoring assessments, including an assessment calendar with screening benchmark windows and guidelines on the frequency of progress monitoring |
| | Analysis of assessment results to determine skill deficits and which students require the next tier of intervention |
| | Decision-making rules for when to change, continue, or fade an intervention |
| | Monitoring for fidelity of implementation |
| | How special education eligibility is determined with RTI |
| | The need to involve and inform parents |
| | Defining the role of the RTI Coordinator or instructional coach, if available |
| | Understanding and managing the change process |
| RTI Coordinators & Instructional Coaches | Validating and strengthening Tier 1 core instruction; research and evidence-based instructional strategies |
| | Differentiated instructional strategies for all students in Tier 1 |
| | Developing an assessment plan – universal screening & progress monitoring assessments, including an assessment calendar with screening benchmark windows and guidelines on the frequency of progress monitoring |
| | Analysis of assessment results to determine skill deficits and which students require the next tier of intervention |
| | Identification and delivery of reliable and valid intervention techniques/lesson plans |
| | Decision-making rules for when to change, continue, or fade an intervention |

| | |
|---|---|
| | Collaboration and/or Professional Learning Communities |
| | Monitoring for fidelity of implementation |
| | The need to involve and inform parents |
| Teachers | Validating and strengthening Tier 1 core instruction; research and evidence-based instructional strategies |
| | Differentiated instructional strategies for all students in Tier 1 |
| | Research and evidence-based components for effective reading, math, and behavior instruction |
| | Identification of appropriate assessments tied to specific skill areas |
| | How to administer and score universal screening and progress monitoring assessments |
| | Analysis of assessment results to determine skill deficits and which students require the next tier of intervention |
| | Collaboration and/or Professional Learning Communities |
| | Identification and delivery of reliable and valid intervention techniques |
| | Documenting students' progress within the tier |
| | Fidelity of implementation |
| | The need to involve and inform parents |
| Support Staff | Differentiated instructional strategies |
| | Research and evidence-based components for effective reading, math, and behavior instruction |
| | How to administer and score universal screening and progress monitoring assessments |
| | Delivery of interventions at Tier 2 and/or 3 |
| | Documenting students' progress within the tier |
| | Fidelity of implementation |
| Parents | How RTI impacts special education eligibility |
| | Fidelity of RTI implementation |
| | The role of universal screening and progress monitoring plays within RTI |
| | How to interpret screening/benchmark assessment results |
| | Understanding any interventions being utilized to support their child – purpose, frequency, and duration of the intervention |

*Note*: Adapted from NASDSE (2007a), Shores and Chester (2009), Appelbaum (2009), Hall (2008), Johnson et al. (2006), Vaughn and Linan-Thompson (2003), Wixson and Valencie (2011), Mellard et al. (2010).

Due to the complexity of the change process involved in implementing RTI and the number and variety of staff members involved in the process, school leaders should plan the professional development in strands related to individual RTI components and differentiate the training based on individual needs (Hall, 2008). When the change impacts a majority of staff

members and requires shifts in paradigms, the single workshop model or one-and-done training sessions will not support the needed change. As stated by Hall (2008), "Research on PD models indicates that sustained job-embedded, long-term approaches are the most effective for supporting change in schools" (p. 98). This is why school leaders need to consider models that involve best practices such as Professional Learning Communities, which encourages sustained job-embedded professional development, and instructional coaches which provide the ongoing support for teachers after the initial training sessions.

Student achievement is increased by improving people through high quality professional development, not by implementing isolated programs for students. This is why the professional development aspect of RTI is so critical. In other words as indicated by Hall (2008), "The success of RTI depends on the knowledge and expertise of the school's teachers" (p. 99). Neuman (2007) also supports this position, "There is no substitute for a well-trained staff's knowledge, commitment, and ability to interact with the target population. These factors are fundamental to the success of any intervention" (p. 19).

Schools and districts will get the most effective and efficient use of limited funding if they focus their energy and resources on a high quality professional development model, especially within Tier 1. This will ultimately limit the number of students that need more intensive interventions in Tiers 2 and 3. Again the goal is to have eighty to ninety percent of students successful at Tier 1. If a school has higher than twenty percent of its students needing Tier 2 or 3 interventions, it may not have the financial or personnel resources available to meet those needs. The research supports this stance that the quality of the teacher has the largest impact on student achievement (Center for Public Education, 2005).

## Lessons Learned from RTI Implementation

The primary concepts behind RTI, early identification and intervention for struggling learners, grew out of an increasing dissatisfaction with the discrepancy model for determining SLD eligibility (Hughes & Dexter, n.d.). The literature notes several significant problems with the discrepancy model for determining SLD eligibility, including: variability in the model's definition, lack of reliability and validity, it is a "wait-to-fail" model that often delays identification and services until intermediate elementary grade levels, it does not differentiate between poor instruction and cognitive ability, the data from testing does not inform service delivery, over-identification of students with SLD, and issues of disproportionality with minority students (Johnson et al., 2006; NASDE, 2007a; Bender & Shores, 2007; Fuchs, Fuchs, & Vaughn, 2008; Hughes & Dexter, n.d.). Although studies have shown that early intervention utilizing effective instructional strategies and strong treatment integrity, especially at Tier 3, can result in significant academic gains (Vaughn & Thompson, 2003), Davies and Walker (2012), indicate that, "To date, no controlled studies have been conducted on how RTI works for SLD identification" (pp. 68-69).

Many researchers and authors have noted that RTI offers noteworthy improvements over the discrepancy model and great potential for educational reform. Bender and Shores (2007) made such statements as: all students will benefit from implementation of this procedure, this move to RTI promises to reform education in very significant ways, RTI will enhance learning across the board in our classes, and RTI will impact every single teacher and child in the nation. Fuchs, Fuchs, and Vaughn (2008), also felt that the reorganization of general education and special education around a multi-tiered service delivery model would increase a school's responsiveness to the diverse learning needs of students, especially those at risk of failure. Prior

to RTI, general education teachers and special education teachers often worked in separate "silos" and did not effectively collaborate or take a team approach to meeting the needs of students. Although RTI has been shown to be successful in removing the old "silo" mentality that operated between general education and special education for decades (Ehren, 2013), more research needs to be conducted on its effectiveness at identifying students with SLD and reducing disproportionality. Research is especially lacking concerning the effectiveness of the problem-solving model of RTI in identification and intervention. As Fuchs, Mock, Morgan, and Young (2003) noted on studies of the problem-solving model, "The studies have failed to produce persuasive evidence that classroom-based interventions are implemented with fidelity, strengthen students' academic achievement, or improve classroom behavior" (p. 163). Johnson et al. (2006) also concluded that the evidence for the problem-solving model was insufficient to support academic gains in reading and mathematics.

Additional research is also needed on the roles that culture, beliefs, and leadership play on the effectiveness of RTI implementation. As noted by O'Conner and Freeman (2012), "Perhaps one of the most overlooked factors affecting RTI implementation is the role of culture and beliefs that exist in a school or district" (p. 304). If a school does not foster a culture and belief that *all* students can and will learn if given the right amount of time and support, RTI implementation will likely fail. This is why Burns et al. (2013) noted that "behavioral change among all organizational participants is crucial" (p. 81). Effective behavioral change and culture cannot be established without effective leadership. Although teachers should be involved in all aspects of RTI planning and implementation to build ownership, it is critical that district leadership understand the conceptual framework of RTI, the basic principles, and the rationale for implementation (O'Conner & Freeman, 2012). O'Conner and Freeman (2012) note,

"Without effective district coordination and decision making, RTI efforts tend to become fragmented and unfocused, and thereby unsustainable" (p. 299).

As schools and districts across the country continue to implement aspects of RTI to support SLD eligibility determination and meet students' learning needs, a deeper understanding of RTI's benefits and limitations need to be defined in case law, legal literature, and professional literature and practices (Zirkel, 2011). As O'Conner and Freeman pointed out,

> Although Response to Intervention (RTI) implementation efforts have been occurring in schools across the country for more than a decade, questions and concerns are emerging, as some schools are not observing significantly improved student achievement or behavior outcomes as expected. In the literature on RTI implementation, most authors indicate there are multiple levels of support that are required for effective RTI implementation. These include individual professional development regarding the rationale for RTI and for developing necessary skills; building-level support encompassing necessary resources, leadership, and structures that promote RTI; and district-level support to drive the broader system. (2012, p. 297)

## Summary

According to NASDE (2007a), "RTI is the practice of (1) providing high-quality instruction/intervention matched to student needs and (2) using learning rate over time and level of performance to (3) make important educational decisions" (p. 5). This definition encapsulates many of the primary benefits of RTI implementation. First, with the implementation of RTI procedures, teachers are asked to critically evaluate the impact of their instruction on student achievement and to better understand the academic skill levels of each student, especially for struggling students (Bender & Shores, 2007). Next, it requires educators to effectively implement and utilize universal screening and progress monitoring data to analyze and compare each student's academic or behavioral performance and achievement gains to those of his/her peers in order to make important educational decisions such as:

1. Is the Tier 1 core curriculum and instruction effective in meeting a majority of the students' needs?
2. Are there small groups of students that would benefit from additional academic or behavioral supports at Tier 2?
3. Are the Tier 2 interventions effective at meeting the students' needs?
4. Are there individual students that are not being successful at Tier 2 that would benefit from more intensive interventions at Tier 3?
5. Are the Tier 3 interventions effective at meeting the student's needs?
6. Does the student need to be considered for special education identification?

When struggling students are identified early and rigorous interventions are implemented for those students, studies show that it reduces the number of students identified with a specific learning disability (Johnson et al., 2006).

This need and desire to reduce the number of students improperly identified into special education, especially the overrepresentation of minority students, led to numerous federal research studies and policy reports opening the door for RTI implementation. As noted by NASDSE (2007a),

> One of the most far-reaching outcomes of the 2001 Learning Disabilities Summit, sponsored by the U.S. Department of Education, was an endorsement of the Response to Intervention (RTI) approach in identifying specific learning disabilities. When Congress passed the Individuals with Disabilities Education Improvement Act of 2004 (IDEA 2004), it authorized local education agencies to utilize RTI. (p. 1)

IDEA 2004 forced each state to clarify in their special education law how students with specific learning disabilities would be identified. States had to permit or require RTI; permit or prohibit evaluations based on the discrepancy model; and omit, permit, or require a third research-based

alternative for identification (Zirkel & Thomas, 2010). Based on these choices, states across the country redefined how students were identified as specific learning disabled.

The promotion of RTI practices in IDEA 2004 and NCLB, led many school districts to the implementation of RTI practices. Although RTI is not a one-size-fits-all model, it does contain several essential components and procedures for effective implementation, all centered on the concept of early identification and early intervention for struggling students. RTI is a multi-tiered model of service delivery offering academic or behavioral interventions that increase with intensity, frequency, and duration as a student moves through the tiers. Tier 1 is research or evidence-based curriculum and instruction designed to meet the needs of all students. During Tier 1, all students are benchmarked using a universal screening assessment. This assessment measures the success of the curriculum and instruction utilized in Tier 1 and identifies students that need additional support (Johnson et al., 2006; Mellard et al., 2010) in Tier 2.

Tier 2 is designed to provide interventions for small groups of students who are not successfully responding to the Tier 1 instruction. The Tier 2 interventions are supplemental and provided in addition to Tier 1 instruction. During Tier 2 the student begins receiving progress monitoring with short, skill specific assessments to determine if the intervention is showing success in closing the achievement gap. If progress monitoring shows that the student is not responding successfully to the intervention, individual students can then be referred to Tier 3. Tier 3 is designed to offer the most intensive interventions delivered by a specially trained staff member. While the student received the Tier 3 intervention, progress monitoring is continued on a more frequent basis. If a student does not effectively respond to the interventions offered at Tier 3, the student may be considered for special education placement.

One of the biggest challenges schools and districts face in effectively implementing RTI is implementation integrity/fidelity (Burns et. al., 2013). As noted by Mellard and Johnson (2008), "Fidelity of implementation refers to how closely the prescribed procedures of the process are followed" (p. 117). Fidelity of implementation must be monitored continuously throughout the entire RTI process. This includes: the delivery of the Tier 1 curriculum; selection and delivery of Tier 1 and Tier 2 interventions; delivery and analysis of universal screening and progress monitoring assessments; following the rules for determining if an intervention must be continued, faded, or changed; and following the procedures to refer the student for special education identification. The responsibility for monitoring for fidelity falls upon the school administrator and the RTI/Problem-Solving Teams assigned to monitor the progress of identified students.

Effective implementation of RTI with fidelity requires a great deal of ongoing professional development in a wide variety of areas. Table 2.4 described the types of professional development required for different staff members implementing RTI. These areas include: Tier 1 curriculum and instructional strategies, Tier 2 and 3 interventions, universal screening and progress monitoring assessment tools, data analysis and data-based decision making, proper documentation throughout the process, and monitoring for fidelity. One of the primary indicators of successful implementation of any initiative, including RTI, is how well the staff is trained to implement the identified strategies and interact with the targeted population (Neuman, 2007; Mellard et al., 2010; Burns et al., 2013; Castro-Villarreal, Rodriquez, & Moore, 2014; Fuchs, Fuchs, & Vaughn, 2008). Therefore, school leadership teams should take considerable care in developing, implementing, and monitoring a professional development plan

covering all key components of the RTI process that includes both initial training and ongoing follow-up coaching.

Due to the complexity of effective RTI implementation and the amount of coordination required between administration, the general education staff, and the special education staff, there is not a great deal of professional literature or research available highlighting successful implementation models. Two key factors in effective implementation are fidelity and professional development. Therefore, this study was designed to examine the monitoring of fidelity and professional development components of effective RTI implementation in two elementary schools in Indiana.

# CHAPTER THREE

# RESEARCH METHODS

Although Response to Intervention (RTI) is not a new concept, new light has been shed on this practice through the reauthorization in 2004 of the Individuals with Disabilities Education Improvement Act (IDEA 2004). In the following quote, Bender and Shores (2007) highlight how IDEA 2004 opened that door for RTI:

> With the passage of IDEA 2004, the federal government officially allowed students to be classified as learning disabled based on documentation of how well they respond to interventions – a procedure commonly referred to as RTI. IDEA 2004 specifies that, for the purpose of determining learning disability (LD) eligibility, a school district may implement a procedure that involves documentation of how a child responds to scientific, research-based interventions as part of its evaluation procedures. (p. 1)

However, RTI is not a special education initiative. It is primarily designed as a strategy to be used in the general education classroom to provide early identification and intervention for any student not meeting academic or behavioral benchmarks. This is a major paradigm shift for both general and special education.

State departments of education, school districts, and individual schools across the country have been writing and implementing RTI plans to become compliant with the law. Indiana is no exception. Indiana allows the use of RTI processes in the identification of students with specific learning disabilities (SLD) and prohibits the sole use of a discrepancy model (Title 511 Article 7, Rules 32-47, 2010, p. 76-77). Some schools have implemented this complex process more effectively than others and have reaped the benefits of early identification and intervention in reading by achieving growth or maintaining high achievement on the state's IREAD-3 assessment. The IREAD-3 is the reading assessment given to all Indiana third grade students for promotion to fourth grade.

The purpose of this qualitative case study was to examine the RTI implementation in two elementary schools in Indiana that have shown growth between March, 2012 and March, 2015 on IREAD-3 assessments or have consistently scored above 80% passing to understand their strengths and needs implementing the core components of RTI. The following research questions guided this study:

1. How are the identified schools utilizing and monitoring for the fidelity of implementation of all core components of RTI identified by Lembke et al. (2010)?
2. What written policies, written procedures, resources, guidance documents, or professional development plans has the district and/or building level leadership established as a framework for implementing and sustaining RTI, and how do the documents describe the fidelity of RTI implementation?
3. What process do the identified schools utilize to identify the research-based, scientifically validated instructional and intervention strategies used within the multi-tiered model?
4. How do teachers involved in RTI perceive the impact of RTI's early identification and intervention on the identification of students with specific learning disabilities?

## Research Design

According to Yin (2014), "The case study's unique strength is its ability to deal with a full variety of evidence – documents, artifacts, interviews, and observations…" (p. 12). Therefore, I designed a case study to address the four research questions that focus on the successful implementation of RTI components within two elementary schools in Indiana. The study of a relatively small number of special cases or schools that are successful at RTI implementation can result in a good source of lessons learned (Patton, 2002). This form of research was selected because it was the best fit for the study. According to Patton (2002),

> Case studies are particularly valuable in program evaluation when the program is individualized, so the evaluation needs to be attentive to and capture individual differences among participants, diverse experiences of the program, or unique variations from one program setting to another. (p. 55)

Although RTI implementation does have a set of common components, its implementation can and should be individualized to the unique differences between schools and students.

This study was designed to define and report the strengths and weaknesses of Indiana school districts in the implementation of the various components of RTI, especially the monitoring of fidelity. The primary sources of qualitative data come from open-ended interviews, direct observations, and written documents (Patton, 2002). Interviews, observations, and document reviews were conducted on the two identified schools to collect and triangulate multiple forms of field data.

## Description of the Sample

As noted by Patton (2002), "Qualitative inquiry typically focuses on relatively small samples selected *purposefully* to permit inquiry into and understanding of a phenomenon in *depth*" (p. 46). This study identified two Indiana Title I elementary schools that were nominated for or received the Indiana Title I Distinguished School Award, and successfully implementing RTI. The two schools were selected based on growth on IREAD-3 scores over time or by consistently having eighty percent or higher of its students passing IREAD-3. The schools were also selected based on their socio-economic status (Title I school-wide schools) and context, to include one rural Title I school and one urban Title I school. Within each elementary school, a sample of educators was selected for open-ended interviews and classroom observations. The sample of sixteen participants consisted of one administrator, two primary teachers, two intermediate teachers, one special education teacher, one interventionist, and one counselor (if applicable) from each building.

## The Instrument

In a qualitative case study, the researcher is the instrument (Patton, 2002). Data were collected through open-ended interview questions, classroom observations, and a review of relevant documents. Through interviews with the sixteen participants, I presented standardized open-ended questions and follow-up questions in order to collect detailed responses concerning the implementation of RTI within each participant's school. During each interview, notes were taken and the verbal responses were audio recorded. The standardized interview questions (See Appendix A) focused on the implementation of the key RTI components under study: universal screening, progress monitoring, tiered instruction and interventions, collaboration, professional development, and monitoring for fidelity.

During classroom observations of forty-five to sixty minutes in length within the two primary classrooms, two intermediate classrooms, and with the interventionist and/or special education teacher depending on where Tier 2 and Tier 3 services were being provided, extensive field notes were taken documenting teacher/student interactions, instructional or intervention strategies, behaviors, actions, teacher collaboration during RTI Team meetings, and any other relevant data.

## Data Collection

Following the approval of the Ball State University Institutional Review Board and each participant, qualitative data were collected through open-ended interviews, classroom and RTI Team observations, and a review of relevant RTI guidance documents. Data were collected through individual open-ended interviews with each participant during individual face-to-face interviews or by telephone. During the interviews, I recorded the audio, took notes, and then transcribed the audio recordings to capture all details provided by the interviewee.

In addition to conducting individual interviews and reviewing relevant RTI documentation, I conducted extended observations of classrooms during Tier I core instruction, Tier 2 and 3 interventions, and RTI Team Meetings. Each observation lasted forty-five to sixty minutes. Extensive field notes were taken during each observation documenting teacher/student interactions, behaviors, actions, curriculum, strategies, interventions, verbal, and nonverbal interactions. Interview and observation data were triangulated with any supporting RTI documentation provided by the participating school.

## Data Analysis

The results of the case studies were analyzed using a combination of inductive and deductive coding. As field notes from interviews, observations, and documents were transcribed, I utilized coding and memoing to analyze and group the data into common themes. This analysis process allows seamless movement between reflections on the current data and revisions to the coding and data collection process for new and often more effective results (Miles & Huberman, 1984).

As noted by Miles and Huberman (1984), "Memoing helps the analyst move easily from data to a conceptual level, refining and expanding codes further, developing key categories and showing their relationships, and building toward a more integrated theory of events, processes, and outcomes in the site" (p.71). During the process of memoing, I also practiced peer-debriefing, a process recommended for attainment of trustworthiness and data validation (Morse et al., 2002). Peer-debriefing required an impartial peer to examine transcripts, findings, and overall methodology of the case study. The peer provided that feedback to increase credibility and validity of the research. As the research progressed, I triangulated the data from the memoing of open-ended interviews, classroom observations, and review of RTI documents to

identify key trends in the RTI success of the identified elementary schools. These findings are presented in chapter four.

## Limitations of the Study

The following limitations have been identified for this study:

- Which school districts in Indiana were selected to be included in the sample.
- A sampling of administrators, teachers, and other staff members were selected for the interviews and classroom observations rather than participation of the entire staff.
- Only elementary schools were identified to participate in this study. RTI is also implemented in middle schools and high schools across Indiana and the country. However, the results to this study may not transfer readily to secondary schools.
- I have served as a member of the Indiana Department of Education's RTI Leadership Team and as a trainer/mentor for the RTI Action Network supporting schools across the country in their RTI implementation. Due to these factors, I have brought personal biases regarding effective RTI implementation into this study. Being well aware of potential biases, I took great strides during the collection and reflection of data to remain flexible and open to new information. As noted by Patton (2002),

> Qualitative inquiry, because the human being is the instrument of data collection, requires that the investigator carefully reflect on, deal with, and report potential sources of bias and error. Systematic data collection procedures, rigorous training, multiple data sources, triangulation, external reviews, and other techniques to be discussed in this book are aimed at producing high-quality qualitative data that are credible, trustworthy, authentic, balanced about the phenomenon under study, and fair to the people studied. (p. 51)

One of the strengths of qualitative inquiry is that relies on and enhances the researcher's real-world experiences and his reflections on those experiences (Patton, 2002).

- My presence in the classroom during observations of Tier 1 instruction and Tier 2 and 3 interventions may have caused disruptions to the normal processes and routines.
- For the purpose of the study, I identified one rural Title I that was nominated for the Title I Distinguished School Award and one urban Title I school that received the Title I Distinguished School Award to compare other relevant factors that could impact RTI implementation such as size of district, percentage of EL students, and percentage of minority students.
- This study focused on Tier I, Tier 2, and Tier 3 instruction and interventions for reading. It did not focus on the behavioral side of RTI. However, behavioral issues can certainly impact a student's ability to learn reading skills in the classroom.

# CHAPTER FOUR

# RESULTS OF THE STUDY

This qualitative case study focused on two participating Title I elementary schools, one rural and one urban, that were attaining successful results on the state's IREAD-3 assessment. In this chapter, I describe the RTI implementation and findings for each individual school, and then discuss commonalities and differences between the two buildings.

## Urban Title I School: "Lancer Elementary School"

### Demographics and Achievements

A recipient of the Indiana Department of Education's Distinguished Title I School Award, the Lancer Elementary School was a school-wide Title I elementary school that served 491 students in grades K-5. The school had a high poverty rate, with a free and reduced lunch rate that fluctuated between 80-82%. When data were collected, the IDOE's website indicated a free and reduced rate of 80.2% with 73% qualifying for free lunches and 7.2% for reduced lunches. The student population was racially diverse consisting of 38.1% white, 34.9% African American, 17.3% Hispanic, 8.4% Multiracial, and .7% American Indian students. Approximately 10-11% of the student population qualified for special education services. Despite demographic challenges, the Title I school performed well academically. The school received an A rating from the IDOE between 2012 to 2015. With the exception of 2012, the school had performed below the state's average passing rate for IREAD-3. However, while serving predominately high poverty students, Lancer maintained a noteworthy performance on the state's IREAD-3 exam with the following percentage of students passing the assessment:

Table 4.1

*Percentage of Students Passing IREAD-3*

| School Year | School | State |
|---|---|---|
| Spring 2012 | 88.1 | 87.2 |
| Spring 2013 | 80 | 91.4 |
| Spring 2014 | 80.7 | 91.1 |
| Spring 2015 | 90.4 | 91.3 |
| Spring 2016 | 83 | 89.8 |

**RTI Process**

Lancer's RTI process began in the general education classroom. Classroom teachers were expected to collect ongoing formative assessment data and try different strategies within the general education classroom. If a teacher struggled to find intervention ideas for his/her classroom, they take the student to a pre-RTI meeting. As shared by a first grade teacher, "When we go to pre-RTI, we will just kind of brainstorm interventions, ideas, suggestions. So, we take those back to our classroom and then we plan to meet." If these strategies do not show positive results for the struggling student, the teacher then completes an RTI form and submits it to the school's Dean of Students. The Dean then schedules an RTI Team meeting for that student. The team brainstorms strategies or interventions to try on the student, sets an academic or behavioral goal(s) for the student, and schedules a follow-up meeting for a few weeks out. According to the resource teacher,

> When we first meet, we talk about the child and the teacher's concerns. At that first meeting we try to come up with some strategies that we can give the teacher to try to help the child in the classroom. Then we set specific goals and a specific date to meet back.

When the RTI Team reconvenes to discuss the student, they may change the intervention or the student's goals. Then, as described by the principal,

> And if that doesn't improve, we will have a specialist, a Special Education specialist, a behavior specialist, or a Special Education resource person from the district come in and observe – come to that next meeting. Look at suggestions, building the case, the data that

> we may need to go on to a further assessment for a special education placement or maybe some other alternative.

One veteran teacher expressed her concerns over how the RTI process has changed within the building over the course of several years. The school was experiencing more and more severe behavioral problems, which dominated their RTI team time rather than their previous focus on academics. According to the teacher, the process has also morphed into more of a brainstorming, problem-solving model than the previous standard treatment protocol model. As she stated,

> It's changed. I think years ago it was much more concise and precise and step by step by step. My personal preference is that. That is my personal preference, that this is a measurable goal – what are we going to do, how are we going to get there? I think that's much more beneficial. Honestly, the way we are doing it now is not that way and I don't see the benefit of it as much because it's 'what do you think you want to do'? I don't like general. I like specific. I like steps, I like measurable, but I think that's part of my personality.

When discussing the overall RTI process, those interviewed did not clearly distinguish between the three tiers of their RTI model. When answering questions about the process, teachers jumped from trying different strategies within the classroom to testing for special education. Only one teacher articulated the use of data to help drive the decision-making process.

> Well, we basically have 3 Tiers for our Reading…we have Tier 1, Tier 2, and Tier 3. Tier 1 is basically your kids who are reading on-level – the kids who usually don't have too much trouble reading. Tier 2 is more of the kids who – for example the Lexile level for 4th grade, the kids need to be at a 740 – so Tier 2 is kids that are maybe around 500-739, basically the kids that are right below the grade level. And Tier 3 are kids that are maybe in the 200-300 range – or up to 500 you could say. Those are the kids who really need the most help (fourth grade teacher).

**Universal Screening**

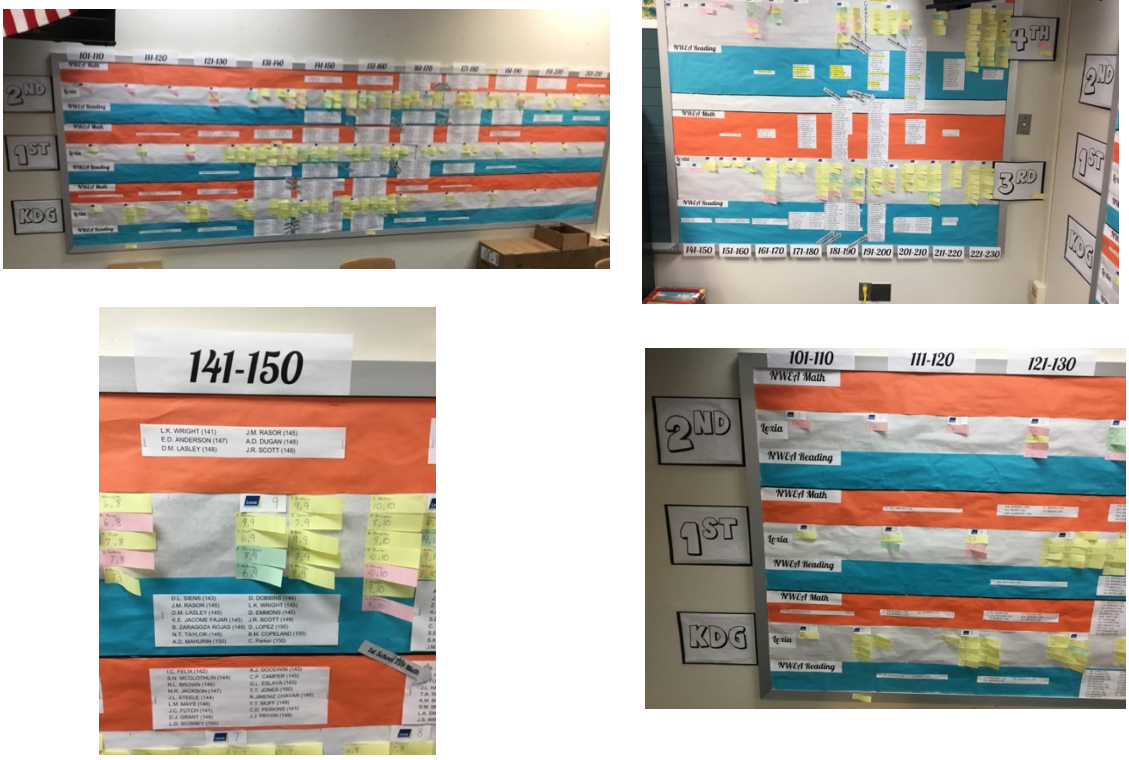
Lancer Elementary made a recent switch to NWEA (Northwest Evaluation Association) as its primary universal screening tool. According to the principal,

> NWEA is our standard test now. That's really been a benefit for us. We really like it. We started late this year so next year they will be able to do the beginning of the year, the middle of the year, and the end of the year so we can really monitor the growth.

However, NWEA was not the only tool utilized to screen students' academic growth. As one second grade teacher shared, "I use results from Lexia daily to come up with lessons for my Tier 2 groups." Lexia is a web-based learning software program that provides differentiated, individualized learning opportunities for readers in grades PreK-5 (lexialearning.com). The school district also established what are called District Checkpoints. These are district-developed assessments given every 4.5 weeks to track students' progress towards mastery on the state academic standards built into the district's curriculum maps. Universal screening assessments were selected at the district level. Most interviewees were unsure about the amount of teacher input into that selection process.

There was definitely an attempt within the school to be data driven throughout the RTI process. Lancer Elementary maintained a data wall where universal screening data were tracked for every student, see photos in Table 4.2. Each student's NWEA RIT score for reading and math and Lexia reading score were placed on the data wall and updated after each universal screening session. This allowed to staff to visually monitor the individual growth of students as they move through the school year.

**Figure 4.1:** ***Lancer's Data Wall***




The staff held monthly grade-level data meetings with the principal and district data specialist to discuss the screening data and to make instructional decisions. As described by a second grade teacher,

> We meet with our Principal to touch base on the results. We talk about grouping our kids and then as a team we talk about what we saw and what direction we are going to go. The data definitely still drives my instruction.

Most of these data discussions occurred within grade level teams; however, Lancer did conduct periodic staff-wide data discussions.

Professional development is a critical aspect of implementing RTI, and must be planned for all components, including screening tools and data analysis. The professional development provided at Lancer has been mostly in-house professional development offered to teachers by the district data specialist. He provides training on the actual assessment tool and some on

interpreting the data following the assessment. The resource teacher shared, "We receive training on giving the assessments. We went over what the data looks like and what it means. So, we have had some staff development trainings with that information." The Title I teacher also shared, "We had training before and after, you know this is what you do. This is what the screen looks like and afterwards, this is how you get this report and that report."

Lancer does not have any formal processes in place to monitor the fidelity of implementing the universal screening assessments. According to a second grade teacher, "We just follow whatever the guidelines are for NWEA – usually we can't read any of the stories to them, sometimes you can read the question…so we just follow whatever the guidelines are. No one checks for fidelity." There were procedures in place to ensure testing windows were followed (testing calendar and email reminders). The school also conducts the follow-up discussions about the assessment results/data following each window. As described by the principal, "We meet to talk about it during data meetings – we call them Data Learning Meetings, where we learn about the data and what it tells us so we can help improve our instruction."

**Tier 1**

Tier 1 reading instruction consisted of a 90-minute reading block where all students received small group instruction, and struggling students received a second "dip" or second small group instructional period. There was a basic expectation from leadership that every teacher saw every student every day for Language Arts and mathematics. The staff felt that this expectation has made a substantial difference in student achievement. They shortened whole group instruction to mini-lessons to make more time for the small group instruction. This concept was reinforced by the Title I teacher,

> It is the expectation that the classroom teacher sees that child every day, by themselves, in a small group with like concerns…whatever. And as is possible, they also get a second 'dip'…if it is myself, if it is an assistant…whatever it is, they get a second round. During the Tier 1, they have two 'dips' if you will.

The teachers utilized the screening assessment data from NWEA, LEXIA, and other sources to form these small reading instructional groups within Tier 1, and to determine the frequency and duration or each group.

> After our data meetings, we will look at grouping the students. So, if I've got a bunch of kids who are around the 200 Lexile range, then I know that I am going to need to see those kids twice as many times per week as I will a kid that's working at 500 or higher. (fourth grade teacher)

Instructional Assistants also support Tier 1 instruction and are assigned to teachers based on greatest need. The principal described the assignment of Instructional Assistants,

> The other part of that is that I don't have an assistant in every room and I don't have an assistant for every grade so the greater need grade levels get more help. The ones that are doing better get less – so it's proportional to the needs of the students. Not everybody is going to get an assistant for 2 hours a day…it doesn't work that way. The assistants go where the need is. That has really helped us.

Tier 1 instructional materials were adopted at the district level and entailed a basal reading series, the leveled reading books that came with the series, and leveled reading books from the website Reading A to Z. Lancer Elementary utilized the Reader's Workshop Model, a whole group mini-lesson followed by small group instruction, as its primary method to deliver Tier 1 reading instruction. When asked what Tier 1 reading interventions were utilized by the school, five of the eight staff members interviewed stated the use of small group instruction or Guided Reading after a whole group mini-lesson. Lexia, Sidewalks (an intervention embedded in the basal series), and Leveled Literacy Intervention (L.L.I.) were also mentioned as Tier 1 reading interventions. The staff assumed that the Tier 1 instructional materials were research-based because they were adopted materials from one of the large national textbook vendors.

"We know the basal is research based because the company told us it was" (second grade teacher).

Teachers reported that specific professional development around the components of reading instruction were lacking within Lancer. Two teachers stated that they have not received any training. Others stated that they were provided with some professional development with the adopted series, which covered the basic components of the series. Some training was also provided in Running Records (a progress monitoring tool) and Daily 5 (a strategy for structuring reading blocks). The principal attributed some of their success to the Reading First training that they received several years prior. However, this also demonstrates some of the ongoing struggles faced by schools today – maintaining training levels as staff turns over.

Monitoring for the fidelity of implementation of the Tier 1 instruction is also an often-overlooked aspect of successful RTI implementation. Three of the staff members interviewed stated that there was no formal process in the school for monitoring fidelity. However, the administration did conduct regular classroom walkthroughs during instructional times, and conducted formal and informal observations as part of their teacher evaluation model. The principal also felt that their ongoing data meetings served as a tool for monitoring fidelity. As he stated,

> You see, once again, when we have those data meetings, they have to have that information – that data to come and share about what's going well, what's not going so well. What are we struggling with? How are we going to address that? What's a resource or something that we can use to help with that? How do we go back and reteach that? So those Learning Data meetings are really powerful and it holds teachers accountable because they have to give that information to me.

**Tier 2**

> At Tier 2, those are the next kids that are struggling, that are not quite getting it with the 90-minute block, but don't quite need Tier 3 instruction. So, with Tier 2, that's when we

> have our data meetings. We look at those kids and then we look specifically at different programs that could help them. (resource teacher)

Lancer did have a formal process for moving students from Tier 1 services to Tier 2 services. At this point, the staff examined the screening data, primarily NWEA and Lexia, to determine if the student needed additional support at Tier 2. If so, the teacher completed an RTI form and submitted it to the Dean of Students. The Dean then scheduled an RTI Team meeting to discuss the student. Besides the Dean, the classroom teacher and Reading Interventionist were involved in this process. However, not all identified students received the Tier 2 services. As described by the resource teacher,

> Not every student that needs Tier 2 will get Tier 2. So, we look at the Tier 2 kids who are the neediest. We don't want to have any more than six in a group and then we look specifically at what those kids need.

Not all of the staff felt that the process is currently running as clearly or as smoothly as in the past.

> I feel like I keep saying about last year. I am sorry – it just used to run a lot smoother. This year I feel is a lot of trial and error. We used to have data meetings where the grade level would get together and we would go over the data and go over the interventions and we would suggest "Maybe you should take that child through the pre-RTI" and so we would meet as a grade level and talk about that stuff and help move kids from Tier 1 to Tier 2. (first grade teacher)

Again, this can be attributed to staff turnover and a shift in focus from academic concerns to behavioral concerns within the building. Another potential obstacle for serving students at Tier 2 is teacher initiation. A third grade teacher describes the potential concern,

> The unfortunate part of that is that if you don't have kids that are not in the RTI process, you don't hear much about it. You have to be the one to show interest that your kid has the need for RTI. I would say, if anything, that's definitely the loophole. Some kids get to 3rd grade and have never even been taken to RTI. I don't know if the ball has been dropped or certain things. I know that's terrible to say, but sometimes it happens.

Additional small group instruction was one of the school's primary Tier 2 interventions. "When they go from Tier 1 to Tier 2, they immediately receive more time with the teacher or more small group instruction. It could even be one-on-one" (fourth grade teacher). The school had a variety of Tier 2 interventions that they utilized, mostly programs purchased with Title I funds. Leveled Literacy Intervention (L.L.I.) is a scripted small group instruction reading intervention program developed by Fountas and Pinnell, and Lexia, software that provides differentiated reading instruction, are two of the main tools. Programs from their basal reading series, Orton Gillingham, and DRA were also mentioned during the interviews as Tier 2 interventions.

Students received Tier 2 reading interventions daily for 20-40 minutes depending on the group and the specific intervention. Tier 2 services were provided by a combination of the general education classroom teacher, the Title I Reading Interventionist, the resource teacher, and instructional assistants. Staff members that deliver a reading intervention received training on how to deliver that specific intervention. The training was usually provided by the Title I Reading Interventionist at the beginning of the school year.

> Yes, at the beginning of the year, we train the interventionist and teachers if they need a refresher on all of the materials that we have to offer so they've been trained on Orten Gillingham, they've been trained on how to use the L.L.I., and if the teacher has not been trained in it, then they are not allowed to do it until they have been trained. (resource teacher)

Progress monitoring begins at Tier 2 for students receiving reading interventions. Lancer utilized a variety of progress monitoring tools. Many of the intervention programs contain built in progress monitoring tools. If the program had its own tool, they utilized that built in tool. If there was no built-in tool, they used DRA, SRI, DIBELS, Running Records, or another assessment. "Within each program there is always a progress monitoring tool. If not, we have

DRA levels" (third grade teacher). Six of the eight staff members interviewed indicated that progress monitoring occurred weekly for the identified students. As shared by the principal, "It used to be three weeks, but now it can be daily for some – it can be weekly for others, and I'd say the latest we go now is probably two weeks." Progress monitoring data were utilized by the RTI Team to determine if the student was making adequate progress at Tier 2. If the student was not making progress after a couple different interventions and about twelve weeks, they moved the student to Tier 3 and special education testing.

Again, there was no formal process for monitoring the fidelity of implementation of the Tier 2 interventions. There were some informal processes in place, "The teacher has to provide documentation to show 'this worked' or 'this didn't work'" (second grade teacher). The instructional assistants were also supervised by the reading interventionist. "I think the reading interventionist, she will look at a lesson – watch the teachers do a lesson – or not the teachers, but the interventionists do a lesson to make sure that they are doing it with fidelity" (resource teacher).

**Tier 3 and Special Education**

In the words of a resource teacher, "Tier 3 is usually for the kids who are two or three grade levels behind and just aren't making any progress with Tier 1 or Tier 2." Within Lancer's RTI framework, Tier 3 was equivalent to special education. The school utilized its RTI Team to determine when a student was not making adequate progress at Tier 2 and needed to be referred to Tier 3 and special education testing. "The RTI Team, once we take it there, the team decides whether or not they are ready for testing" (third grade teacher). Prior to referral, they tried different interventions until they felt like they had exhausted their options for the student. Once

it was determined that the student needed testing for a specific learning disability or another special education classification, the School Psychologist took over the process.

At Tier 3, the students received services at least four days a week for 20-30 minutes from the resource teacher, reading interventionist, or special education instructional assistants. As described by the resource teacher,

> Tier 3 instruction is usually taught by the special education teachers and the reading interventionist. Because we don't have a whole lot of them, then we can get down to what is needed - in that group of Tier 3 students we try to have no more than three students at a time. So, we take the lowest of the low for that.

The staff tried to utilize a variety of interventions at Tier 3, including Orton Gillingham and teacher created materials.

> If we cannot find a scientific based program that works – then at Tier 3 we typically use teacher developed lessons and that way we get lessons that are specifically tailored to what those students need. We can do these lessons at a slower pace. We can go back and review as much as we need to make sure that they are working for the students. (resource teacher)

When interviewing the general education teachers about Tier 3, most were not aware of what interventions were used to provide service to the identified students; indicating a lack of collaboration and communication between general education and special education. "I really don't know. Those kids are going to be with the special ed. or even the EL, so I couldn't really tell you" (fourth grade teacher).

The general education staff was also not aware of the professional development opportunities provided for Tier 3. The principal shared information on the training provided to the special education department,

> Yes, not to the degree that I would like to but most of the teachers that are here – well here's another thing – the teachers, special ed., they get training periodically from the district to some degree. Some of our professional development that we do in the building helps them too.

Progress monitoring also occurred at Tier 3 for identified students. The special education staff utilized the same progress monitoring tools used in Tier 2. The frequency of that progress monitoring can vary from daily to every couple of weeks. Again, they utilized the progress monitoring data to determine if the intervention were working or if they needed to change interventions. A fourth grade teacher shared, "They just use it monthly. Basically, after a month of trying an intervention, they know if it's working or if it's not."

The only processes to monitor for the fidelity of implementation of the Tier 3 interventions consist of the administrators conducting classroom walkthroughs and observations for the evaluation model. Progress data were also reviewed at the student's annual case conference.

Special education falls under Tier 3 instruction. When asked how RTI had effected the identification of students with SLD, most of those interviewed claimed that the number of referrals for special education testing had decreased due to RTI services. This idea was supported by a third grade teacher and the principal,

> The extra work of completing the RTI paperwork and trying different strategies pays off in the end. I have seen a lot of success definitely with two of my students this year because they have those supports in place now. I mean, the difference is crazy. (third grade teacher)

> Yes, I would say we are having less referrals for special education testing because we are really working on meeting the needs of the kids early on which is what we need to be doing and it saves them failing and failing and failing and it gets them back on track and they feel like they can really do some things. And that's the goal of the whole thing. (principal)

The school worked with parents that requested special education testing outside of the RTI process. However, a majority of the parent requests did not qualify for special education, as indicated by the resource teacher,

> There are sometimes, if it's a parent request, then we don't have a choice. Typically, when parents request testing, they usually don't qualify. So, I think the RTI process that we use – I think we've been almost 100% - maybe 98%, but we've been very accurate in identifying the students.

The staff members interviewed also agreed that when a student went through the RTI process and was tested for special education, the results of the testing were more reliable due to all of the data collected during the process. When discussing the concept of reliable special education testing due to RTI, the Title I Interventionist shared,

> I think so. I think the results have to be more reliable because you've got so much more data and you've been looking at it with a more critical eye instead of a gut feeling. Sometimes your gut is absolutely correct, but sometimes it's not.

**Staff Collaboration**

Lancer Elementary had structures in place to support staff collaboration. Grade-level teams met on a regular basis, at least once a week, to discuss student growth and performance. "We meet as a team…we meet as a 1st grade team once a week and we talk about everything under the sun – from standards to students" (first grade teacher). The principal also led a faculty meeting every Wednesday morning. A portion of the meeting was dedicated to the special education and EL teachers for sharing data and trends. Once each quarter, after the district's checkpoint assessments, the principal and Data Specialist met with teams to discuss the data. "As soon as we hit a checkpoint, we will have a data meeting with the principal and all of the assistants, and go over that as well so that's another data source that we use" (fourth grade teacher). The school did not have a specific purchased software program or data warehouse to help manage data. Instead, they utilized Google Docs, spreadsheets, and other tools to collaborate on student instruction and interventions.

**Special Considerations**

When asked how the school allocates resources for RTI, the staff mainly discussed human resources, which were assigned based on needs vs. a model where all teachers were assigned time with an instructional assistant. As described by the Title I interventionist,

> As far as personnel, I look at data for the whole school and see where the need is. Wherever the need is…the people go. If it is two IA's in 1st grade and nothing in 2nd grade, then that's where it is because that's where the need is. If it's X room as opposed to Y room, that where the need goes. It's not 'everybody gets 20 minutes'. It's wherever the need is.

This has not always been a popular approach to assigning human resources, but most of the staff felt like it helped increase student achievement.

> So, you put your resources where the greatest need is. That's IA's too. The instructional assistants go…see here is why that data wall is so important. We had kindergarten teachers who think they need help all the time. Well, two years ago they did have the lowest and they got the help…well they think they ought to have it all the time. I said 'Let's look at the data wall this year. You guys are the highest achieving in the building. So why would we give you all the help when you are doing better than all the rest of them? (principal)

When asked about funding allocated for RTI implementation, no one interviewed was aware of any dedicated RTI funds, other than the state's Early Intervention Grant funds and funds from the federal Title I Grant which were used for RTI assessments and interventions. Again, no software or specific tools have been purchased to help manage the RTI data. The staff primarily utilized tools within Google.

There were mixed responses when asked about the building level and district level support for RTI. For example, "I just feel like it's been better in the past. I think with all of the transition this year (to individualized learning), maybe some things have gotten kind of lost in translation" (first grade teacher). A second grade teachers also stated that it's not "as solid" of a

process as when it was the old GEI process. However, the resource teacher stated that the building administration did support RTI,

> The building level leaders have all been very supportive of the RTI process. The principal tries to make it to as many meetings as he can – when he doesn't have other meetings. Our Dean makes it to all of the meetings. They listen to our suggestions, they offer suggestions so I think they have been very supportive in the RTI process.

Those interviewed also shared that there was district level support early on in the process of implementing RTI, but that support was not as visible in recent years. A third grade teacher described it as,

> They definitely pull out those, like I said, "911 kids", students the district has identified as 'at risk', and right away from the beginning of the year, you know who your kids are that you want to keep an eye on. But other than that, no.

**Barriers to Implementation**

Those interviewed identified a variety of barriers to the implementation of RTI, which included getting teachers on board with the entire implementation process.

> We didn't know how to roll it out properly. So, I think there was just some lack of clarity as we began to roll it out and then I feel like it got good, and then there were more hurdles and now it's kind of struggling again. (first grade teacher)

Those interviewed also identified three related barriers. First, the problem of teachers wanting to go straight to special education testing rather than going through all of the steps of RTI.

> Many times, teachers want to go immediately, when the students are struggling – from my student has a problem to please test them for special education. So, I think the biggest struggle that we've had – and we still struggle with it a little bit – is to get teachers to collect data and use the data to drive their instruction. (resource teacher)

The second related barrier was teachers not wanting to complete all of the RTI documentation. When a teacher felt that a student needed RTI services he/she must complete an RTI form and turn that form into the Dean. That started the process with the RTI Team. Completing that form and the follow-up progress monitoring documentation can be time consuming for a teacher.

Finally, lack of time was another identified barrier. As the principal shared, "Time. Time was a real barrier. And that's two-fold. Time in getting it established and time – teachers not liking to having to wait so long to get kids into – and part of that too was materials."

Another hurdle was getting parents on board and understanding the RTI process. "Definitely parents for sure. If they are not on board then that shuts the process down completely" (3rd grade teacher). Transient students were also an issue identified by those interviewed. A third grade teacher explained, "A lot of moving, transitions, and things like that. We don't always get the same kids that we had at the beginning of the year at the end of the year. So that's definitely a barrier."

Another barrier was understanding all of the data and how to use data to make instructional decisions. Lancer Elementary utilized ongoing data meetings and a district Data Specialist to help address this issue. Additionally, Lancer was dealing with more severe behavioral issues. This shift from an RTI focus on academics to behavioral interventions was causing frustration for a few staff members.

When asked what they would do differently if they had to implement RTI again from the beginning, those interviewed identified five changes, which included the utilization of aspects from their old General Education Intervention (GEI) model/process. A second grade teacher stated, "I would go back to the old way." The Title I interventionist shared,

> Well, because when we have the meetings, like when we have a RTI meeting, it's very loosey-goosey. It's very, "How do you think this is doing? What have you kind of tried?" A few years ago, we would have, "What are the child's strengths, what are their weaknesses? Where is their point of need? What are you going to do? What have you done? What is your measurable goal? Did you make it – yes or no? It was easy, as a teacher, to understand the accountability. And not just come in with the gut. And I feel like right now we are going with our gut and not our data and I think that's a disservice because it's you're open to interpretation.

Provide more professional development on all of the components of RTI and more consistency in the implementation were also identified as recommended changes by those interviewed. Additionally, they wanted more support and direction from the Indiana Department of Education early on in the implementation process. "I wish the state would have started out with what they wanted to begin with" (principal). Finally, hold people more accountable for RTI implementation with fidelity. A third grade teacher explained,

> Hold people accountable. I feel like there needs to be a set meeting every week – no matter what. Whether there's a kid in the process or not. Data needs to be talked about at every meeting, regardless of whether a kid has come up for talking points. Like "Where are we with first grade, second grade?" at least in some shape or form like that.

**Teachers' Opinions on RTI Efficacy**

When asked if RTI was working in their school and how did they know if it was working or not, there was a mixed reaction. Five of the staff members interviewed felt that RTI was working based on improved student achievement data, such as IREAD-3. As shared by a third grade teacher, "I think it's definitely working. When you look at our data wall, you can see kids that start the year as 'red' and they end up moving, at least. I mean you see the change, which is great." The principal added,

> Yes, because of the achievements that students are making on a daily basis, over I'll say nine week periods, semesters and throughout the year. In our scores, that's validated through our IREAD and our percentage of students doing well on ISTEP.

Four of the staff members interviewed thought the old GEI model worked better, that there has been too much staff turn-over, or additional professional development was needed to support implementation.

> I think you've gleaned from me that I don't think it's working as well as it has in the past, and I don't. I went to a meeting and they asked how that's working in the building and I was real quiet and he said "Well, interventionist's name, what are you thinking"? I said "You don't want to know what I'm thinking". I think it can be better. (Title I Interventionist)

There was also a general feeling among some of those interviewed that the RTI needs have shifted from an academic intervention focus to a behavioral intervention focus due to the more severe behavioral issues the school was dealing with at the time. A second grade teacher indicated that this was one reason why she felt that RTI wasn't as effective as it could be when asked if it was working,

> That's a hard question. Right now, no. I would just say based on our climate right now…our student climate. It's just more focus is on behavior right now than academics it's so crazy. And so, because of that, we are doing everything we can just to survive every day and not have a chair thrown at my head. And the academics, obviously, have to sit on the back burner for a second until you've got a calm kid in front of you so for me this has probably been the hardest year I've ever had.

When asked what parts of RTI contributed to the successful IREAD-3 scores, those interviewed identified four factors: The school's focus on data (checkpoints, NWEA, etc.) and utilizing that data to make instructional decisions. A second grade teacher shared, "But I do think we use data…data drives our instruction and just knowing who needs what and when and how long has helped." Additionally, the grade level teams work well together. Third, the early identification and early intervention of the RTI process. According to a fourth grade teacher, "Students being quickly identified and then getting that additional help. That's huge." A second grade teacher added,

> I think that we have always done and always will do a great job identifying those kids immediately, early on, that are struggling - are going to struggle and we work very hard at getting them help – whether it's putting them in an intervention.

Finally, Lancer had established a culture of never giving up on a struggling student. As the principal explained,

> We never give up on kids. I think the culture and the climate of high expectations for our students and that we're not going to give up on kids and that we have to find the interventions that will help them be successful is the key. And we never give up. And we

> just keep moving…and that could be Tier 3, but we're going to continue that journey until this child is successful. I think that is why we are doing so well.

**Urban School Findings**

Through the case study process of interviews, observations, and document review, the following findings were surfaced:

1. For their RTI Team process, the school used more of a problem-solving or brainstorming process than a standard treatment protocol or hybrid model. This may be due to the school's shift in focus from academic issues to behavioral issues. As a result, not all staff members were satisfied with the current model when compared to their old GEI model.
2. Some of the school's processes, especially students moving between Tier 1 and Tier 2, were not well defined.
3. The school has a variety of universal screening tools to collect growth data on students.
4. Participants revealed a lack of monitoring for fidelity was evident throughout the model (universal screening, progress monitoring, and implementation of interventions).
5. Some professional development has been provided throughout the implementation process by the district or internally.
6. A strong practice that emerged was the school's focus on small group instruction, which was an expectation established by building leadership.
7. Support staff were assigned to various grade levels based on student needs. If one grade level was performing well on screening assessments, they may not receive additional support from instructional assistants.
8. General education staff were not aware of what happened in special education.
9. No General Fund dollars were dedicated for RTI implementation. RTI has been funded through Title I and the state's Early Literacy Grant.

10. The school was not able to provide any supporting documents for RTI (i.e.: guidance documents, policy documents, procedural documents, etc.). Such documents help provide the needed clarity that some staff members felt was lacking.

## Rural Title I School: "Green Valley Elementary"

### Demographics and Achievements

A finalist for the Indiana Department of Education's Distinguished Title I School Award, Green Valley Elementary School was a school-wide Title I elementary school that served 217 students in grades K-5. At the time of data collection, the IDOE's website indicated a free and reduced rate of 78.1% with 64.4% qualifying for free lunches and 10.7% for reduced lunches. The student population was 77% white, 16.6% Hispanic, 4.6% Multiracial, and 1.8% Asian. The school had a disproportionate percentage of students identified in special education. According to the National Center for Educational Statistics, 13% of all public school students are identified as special needs. The intervention specialist indicated that there were 42 special needs students on her case load, which would equate to 19% of students identified as special needs. Another challenge faced by the Green Valley was student mobility. According to the principal,

> Our kids move in and out, and have been in a number of schools. Typical registration would see about 40 students not return and we will get 40 new students and that seems to be very normal here, which with our population size is quite a number.

Despite these challenges, Green Valley performed well academically. The school received an A rating from the IDOE between 2012 to 2015. Being a high poverty school, Green Valley also maintained a noteworthy performance on the state's IREAD-3 exam with the following percentage of students passing the assessment:

Table 4.2

*Percentage of Students Passing IREAD-3*

| School Year | School | State |
|---|---|---|
| Spring 2012 | 86.8 | 87.2 |
| Spring 2013 | 97.9 | 91.4 |
| Spring 2014 | 100 | 91.1 |
| Spring 2015 | 93.5 | 91.3 |
| Spring 2016 | 87.5 | 89.8 |

**RTI Process**

Each year, the teachers begin the year by providing Tier 2 support for the students identified in RTI the previous year. This practice continued until after the fall universal screening assessment was conducted and analyzed. As shared by a first grade teacher, "We do our beginning of the year testing – we use mClass. Students will usually start in a small group RTI setting at the beginning of the year based on test results from the end of the year before." After conducting the universal screening (mClass), teachers look for the bottom 20% or lowest performing students. They then subtract the students that are receiving services through special education or EL, and examine the remaining struggling students. Out of the remaining identified struggling students, they determine who will benefit the most from the Tier 2 services. A second grade teacher explained,

> Then as soon as our first round of mClass testing is over, we take like the bottom 20% and really look at those kids and see who would benefit the most and which of those 20% are special ed., which are ESL, and then we kind of choose from the left-overs there. A lot of times when you are picking for RTI, it's not always just who needs help, but who would thrive the most.

The primary teachers (grades K-2), rely more heavily on teacher recommendation than the intermediate grades (grades 3-5). The intermediate grades focus more on the universal screening data. Once students are identified for Tier 2 support, teachers complete an RTI form that goes to

the RTI Team. The RTI Team meets monthly to discuss identified students, but alternates months between primary students and intermediate students.

**Universal Screening**

Green Valley utilized a variety of universal screening tools; however, its primary assessment tools were mClass and TRC (Text Reading and Comprehension). mCLASS was a universal screener provided by the IDOE that measured the development of reading skills of all students in grades K-5 through two main assessments: Dynamic Indicators of Basic Early Literacy Skills (DIBELS) and the Text Reading Comprehension (TRC) assessments. A second grade teacher shared,

> Our main thing that we look at is mClass. We use the benchmarks that are set through mClass as our main focus on who to choose and then other baselines that we do is usually just like middle of the year – what I look at is my middle of the year goals in our curriculum and who is like grade levels behind that middle of the year benchmarks.

Green Valley also utilized Acuity, Marie Clay Oral Language, Observation Survey from Reading Recovery, and a kindergarten screening assessment that assessed site words and letter sounds. There were mixed responses when asked about the process for monitoring the fidelity of the assessments. Five staff members were not aware of any systems in place to monitor for fidelity of implementation of the assessments. Three staff members mentioned the professional development that was provided on the assessments. A professor from a local university served as an RTI consultant. The university advisor attended the monthly RTI Team meetings and provided support for implementation. When discussing the fidelity of the universal screening assessments, the principal shared, "The university advisor monitors those with our instructional assistants and I also pay close attention to what's being done with them."

There was also an attempt within Green Valley to be data driven throughout the RTI process. Green Valley also maintained a data wall where universal screening data was tracked

for every student, see photos in Table 4.4. Green Valley's data wall was divided into a column for each grade level. Each colored row represented a level. Green was at grade level. Blue was above grade level. Yellow represented the "bubble students" that were slightly below grade level (Tier 2 students), and red represented those students significantly below grade level (Tier 3 students). Each student had an individual card that housed a variety of data for that student from the universal screening assessments.

**Figure 4.2:** ***Green Valley's Data Wall***

The school updated the data wall three times a year after each universal screening window. A second grade teacher explained, "We have to update our data wall after all three assessments, so beginning, middle, and end of the year, but the principal lets us use our professional judgment on how to go about using the data." The data were primarily discussed informally in grade-level teams. The RTI Team also evaluated the student screening data and other factors during their monthly meetings. The principal shared,

> Universal screen doesn't tell the whole story, and that's something we discuss at the meetings too. So, they had a terrible universal screen, but they are getting A's and B's

> so….. We discuss that kind of thing as well – just using the meetings a lot to go through the data.

When discussing the professional development provided by the school or district on the universal screening assessments (conducting the assessment and analyzing the results), I received mixed responses from those interviewed. Two staff members shared that they received no training on the screening tools. Two shared that they received training when they first implemented mClass or when they were first hired. Three additional staff members stated that they had received training on the screening tools. The principal shared that she developed an understanding of data analysis during a Master's Degree course and from trial and error in working with the data, "They have as far as how to do it and all of that good stuff. Data analysis on my end has just been through schooling and learning by 'trial by fire'."

**Tier 1**

Green Valley implemented a three-tiered model for RTI, with the third tier providing special education services. In Tier 1, the teachers utilized the previous year's data to provide support for struggling students until they received the new screening data after the fall testing window. In Tier 1, teachers tried different interventions in their classroom. This may consist of small group or one-on-one instruction. Waterford Reading software was utilized daily for all students at Tier 1, along with an after-school homework support program. Small group instruction occurred as much as possible, typically two to four times a week. A first grade teacher explained,

> I do small group instruction for reading. And during the RTI time -the students that don't get pulled – I will do centers and small groups and I will pull kids if I see that they are struggling on a subject, then I will reteach it and we will work on redoing some work, just to make sure that they understand.

Green Valley implemented an RTI block within their schedule. During the designated RTI block, general education teachers did not teach any new content to students. All of the students that needed services (special education, EL, RTI) were pulled out during this time. The general education teachers conducted remediation or enrichment with the remaining students. The principal explained,

> We do have RTI time blocks at every grade level. So, during that time, no new instruction is going on – that's by design of the block and so during that time special education kids are pulled out, EL kids are pulled out, Speech kids are pulled out, OT kids – whatever needs there are left in the room is getting intervention from the teachers. Sometimes it's enrichment; it's not always remediation, it's enrichment as well. During that time teachers can work 1:1 or 1:4 while other kids are doing AR (Accelerate Reader) reading or while they're doing stations.

At Tier 1, Green Valley utilized a basal series (Scott Foresman Reading Street) and the leveled books that came with the series as their core curriculum. They also had a leveled library that provided additional options for teachers. Besides the basal, teachers utilized the Waterford Reading software, RazKids website, and mClass activities. The school utilized a variety of instructional strategies. As shared by the principal, "It varies, primary (grades K-2) uses the Reader's Workshop Model, but 3rd grade ability groups." One factor that can lead to poor practices making their way into Tier 1, like ability grouping, is a lack of professional development. Five of the eight staff members interviewed indicated that they had received little to no training on reading instruction. The only professional development received came with the adoption of their basal series. The principal explained, "Whenever we've done a textbook adoption, it's come with training. So, we have done training since having Reading Street. This is our 3rd year with Reading Street and they have offered trainings every year."

Those interviewed provided a mixed response concerning how Tier 1 instruction and interventions were monitored for fidelity. Two of the staff members stated, "I don't know."

Three staff members and the principal indicated that the principal does regular classroom walkthroughs and observations tied to their evaluation model. They also indicated that the data collected and discussed served as a monitor for fidelity. As described by the principal,

> …to be quite blunt, it's obvious with teachers' end-of-year assessments that if they're not getting the job done…they're obviously not using the materials or teaching to the standards and that type of thing. A lot of it's evaluation and observation.

**Tier 2**

If the student continued to struggle, the teacher completed the RTI paperwork and referred the student to the RTI Team. The RTI Team then met to discuss the student's data, strengths, weaknesses, home life, grades, etc., and the team determined placement in the program and interventions. The principal shared,

> On our committee, we do our resource teacher, Reading Recovery teacher, myself and then two grade-level teachers. They just come in and give a report and we just kind of talk about the kids and make sure it's an appropriate fit, and that they are not in there for the wrong reasons – they are not behavior problems. That they are just not trying to get out of the classroom.

Green Valley could only serve a certain number of students in RTI due to staffing limitation. Therefore, they routinely moved students in and out of RTI services based on need and performance. Those students that qualified for Tier 2 services primarily received a program called PALS or Reading Recovery. The school also utilized a variety of software programs for interventions, as explained by the principal,

> A lot of our computer programs that the kids will get put on are computer programs for like a 2nd double dipping so they may do Waterford two times in a day or they may do Fast Math or ST Math – we have a bunch of different computer programs that they will put the kids on sometimes as a double dip during that RTI block. All research-based again.

RTI services were primarily provided by the Reading Recovery teacher and the RTI interventionist. The frequency and duration of the intervention depended on which services the

student was receiving. Reading Recovery was daily for 40 minutes with one child at a time. The RTI interventionist was two days a week (Mondays and Wednesdays) for 30-40 minutes for small group interventions and then progress monitoring on Fridays.

A majority of the RTI students received progress monitoring every Friday from the RTI interventionist, who conducted one minute reading passages for fluency and comprehension. As shared by a second grade teacher,

> The interventionist works on skills those two days (Mondays and Wednesdays) and like I said, every Friday she does a fluency passage because typically most of the kiddos in there have poor fluency and comprehension skills. So, she does, usually a timed one-minute read and then she asks two to three comprehension questions about the story. They usually finish reading the passage together and they talk about beginning, middle, end, characters, and all of that kind of stuff.

DIBELS, mClass, and Running Records were also mentioned as progress monitoring tools for the school.

The university advisor provided annual and ongoing professional development for the staff members that deliver the Tier 2 services. The principal explained,

> Our interventionists go two days in the summer to meet with the university advisor and she does refreshers on data collection – this is how we do the process. Anytime we get a new program, she does a training with them. She usually meets one time over the course of the year – in the middle, like right at semester – and discusses with them just where we are struggling, what we need help with.

A second grade teacher also shared,

> I know that our RTI instructors meet with the university advisor who came in and started this for us, so she is constantly working with them on different types of strategies and different things like that to use with them.

The university advisor and the principal were also responsible for monitoring the fidelity of implementation of the Tier 2 interventions. The principal shared, “And the university advisor is also very…she will go through their binders of the student work and make sure that what they are filling out looks like it should.”

During the monthly meetings, the RTI Team determined, based on data and other factors, if the student needed to change interventions, goes back to Tier 1, or needed to be referred to Tier 3. The principal shared, "That's where our monthly meetings become really, really important. So, for us, at those monthly meetings, we will get the charts out and just have a conversation. We start to look at the trend." She then went on to explain the conversations that occurred within the RTI Team meeting,

> We do data collection and then at our monthly review we can go back and say 'are they making any progress'? What kind of progress are they making? Is it accelerated progress? Are they making no progress? And if they aren't making any progress, we discuss what we need to do, what can we change? Is it time to test? Is it time to move to the next in the RTI process and determine if we have enough data to do an SLD testing if that's what we think is going on.

**Tier 3 and Special Education**

Within Green Valley, Tier 3 equates to special education testing, placement, and services. If a student was not showing adequate growth at Tier 2, the RTI Team would refer the student to special education. At that point, the parents were involved in the process and special education observations were conducted. As a second grade teacher explained,

> Once the committee decides that something more needs to be done, testing or whatnot, the testing takes place and then the kids that qualify will jump right in with the resource teacher and if they don't qualify then we make that decision. Are they going to benefit from Tier 2 or do they need pulled back into the classroom? So, if they make it into Tier 3, Special Ed, then they start their services with her based on the findings on the testing.

When asked what interventions were utilized at Tier 3, five of the staff members interviewed could not identify any of the interventions, even though their students were receiving those services. According to the principal, "It's goal specific, so she's got different interventions that she is using depending on what their goals are. Different programs that she has depending on what their goal is." Regardless of the intervention, Tier 3 students received services daily for 35-

45 minutes. Those services were provided by the special education teacher and special education instructional assistants.

In Tier 3, the special education teacher evaluated the IEP goals every other month using primarily informal and teacher created assessments. The principal shared,

> She does her own probes. Her probes are more informal and she adds them…some of them are formal assessments, but most of the time they are informal and they are things that have been teacher created that she can then track because they are more specific to their goals.

When asked about the frequency of progress monitoring, the general education staff interviewed could not answer the question. According to the principal, "She does it every two weeks. At a minimum, per our IEP's – the way our district is set up – they have to do them quarterly for each nine weeks – midterm." Within Tier 3, it was the case conference committee that decided if an intervention needed to be changed for the student. Prior to changing an intervention, the committee would give the current intervention four to six weeks to see of it helped close the skill gap.

The district's Special Education Director provided annual professional development for the special education staff. The university advisor also provided some additional professional development support. The principal and special education director monitored for fidelity at Tier 3. The principal and Special Education Director conducted regular classroom walkthroughs and observations tied to the evaluation model. Case conference discussions and progress monitoring also helped monitor the fidelity of implementation.

When asked how RTI has effected the identification of students with SLD, I received mixed responses from those interviewed. Six staff members felt that it had decreased the number of students identified for special education. The intervention specialist shared, "RTI is a great process, now have data to look at, ideas of where to start. Identification has declined."

However, two participants were not sure that it had decreased those numbers. The principal explained,

> I don't know that that's been true here. In the last four years, I don't know if our numbers really declined. I would say that the kids who are getting into Special Ed are more appropriately placed so I don't know that our number has dropped.

Seven of the eight interviewed reported that the special education testing results were more reliable due to the RTI process. A first grade teacher shared, "I would say so (results were more reliable) because, I mean, if you have a whole semester of Reading Recovery and they are still struggling, that lets you know that something extra probably needs done."

**Staff Collaboration**

Those interviewed indicated that there was a combination of formal and informal collaboration done by the staff. Much of the discussion about students was done informally during grade level prep time, lunch, and passing periods. Each grade level in Green Valley had a common prep period to facilitate this collaboration. A second grade teacher explained,

> A lot of it is just informal discussion. We talk about their grades and then we talk about how they are doing on the progress monitoring. We talk about where they are struggling, where they are doing well and then we will share a lot of ideas. If she is doing something that is working well with her kids then, you know, I might try it with my kids – or vice versa.

There was a basic expectation set by the principal that teachers collaborate on a regular basis. The teacher teams must complete a collaboration record form and submit it to the principal after each session. The principal shared,

> But our teachers, they team at the same time, you know, grade level…it's not officially teaming, but they are on prep at the same times so they will team together a lot and you'll hear – they are required to collaborate with each other submit that paperwork to me that they've actually collaborated and what they've discussed and on those papers, you will often see that they are talking about kids. They have to collaborate and turn in a paper once per month, but they are doing it way more than that.

In a more formalized process, each grade level team met with the principal following each universal screening assessment window to discuss the data.

> We will do data meetings. Typically, after every benchmark, we will have a meeting with each grade level teachers at each grade level and myself and we will talk about their data: how are we doing, what do we need to work on? And that kind of starts the Tier 1 process for the teacher back for me to see. Are we going to have kids that need to Tier 2, Tier 3, etc.? (principal)

Green Valley did not have any specialized software to aid the collaboration. They had just purchased PIVOT, a data warehouse, they were still in the process of getting it up and running.

**Special Considerations**

When asked how resources were allocated for RTI, three of the staff interviewed could not answer the question. The principal explained that the personnel resources are assigned by the district evenly across each building. Four of the staff interviewed were not aware of any funding that was specifically allocated for RTI. The school did utilize the IDOE's Early Literacy Grant and Title I funds for RTI. According to the principal,

> We use an Early Intervention Grant to support – the one we get from the DOE – and that's what actually funds our RTI programming. That funds the Reading Recovery and the actual RTI program. Title I pays the Reading Recovery teacher's salary, but all of her materials come from the Early Intervention Grant – I think is how that works

Green Valley utilized Google Docs and the PIVOT Date Warehouse to help manage all of the RTI documentation and data.

When asked about building and district level support for RTI implementation, those interviewed shared that they received great support from the principal. According to the intervention specialist, "The principal is really involved, always in meetings, very supportive." A second grade teacher added, "I feel that RTI has been pushed – for good reasons." Those interviewed also appreciated the district providing the support and professional development from the university advisor. "They have been willing to contract the university advisor to allow

us to have somebody to help us through the Tier 1, 2, 3 processes of RTI" (principal). However, those interviewed were unhappy about the district cutting back on the interventionist's time in the building over the past few years. To save funds, the district eliminated positions, which ultimately resulted in an interventionist working in two buildings, rather than an interventionist for each building. A second grade teacher shared,

> It's frustrating that we can't have the interventionist all of the time because, in my personal opinion, if you want these kids to catch up on skills that they are lacking – it needs to be a steady, every day thing. Which it was my first year, when it first started. But now lack of funds means lack of people.

**Barriers to Implementation**

The staff interviewed identified three major barriers to the RTI implementation within the school. The first barrier was not having the interventionist five days a week. This created a situation where not all of the students needing RTI services received it. "Too many kids need served and all can't get it" (fifth grade teacher). The second barrier was getting people on board and understanding what RTI is and what it is not. According to the principal, "People didn't understand it. I feel like that was a big issue… was trying to get the correct information out to understand what it is…what it's not. I think that was probably a really big one…what it's not." The final barrier identified by those interviewed was a lack of funding for RTI implementation.

When asked what they would do differently if they had to implement RTI again, they responded with three changes. First, they would use a certified/licensed teacher for interventions instead of an instructional assistant (the school's Tier 2 interventionist is a paraprofessional and not a licensed teacher). They would also have a full-time interventionist so that they could provide services to more students. "I would like to see more kids be able to be in the program. More smaller groups. Especially in low income situations" (third grade teacher). Finally, they would provide more professional development on understanding and implementing RTI. The

principal shared, “Training! Training. More training in the beginning to get everyone to understand. I guess that’s coming from me as a teacher.”

**Teachers’ Opinions on RTI Efficacy**

When asked if they thought RTI was working in their school and how they knew it was working, everyone interviewed felt that RTI was working based on the evidence of student growth. A first grade teacher shared, “I feel like it is. My students who are in RTI, they seem to show a lot of growth by the end of the year.” A second grade teacher added,

> Yeah! I mean, the interventionist does a great job. It shows when she can start with a kid say in September and then by our next RTI meeting they’ve made such great gain that we can take them out and they are doing well in the classroom. I have two good examples of that in my classroom just this year. Kids love getting to go – they love that extra one-on-one or small group time with her so they are excited about it.

The principal also shared this idea,

> Yeah, I would absolutely say that it’s working. I would attest that too. I know it’s working because we are still an ‘A’ rated school. We were an ‘A’ rated school this year before they reverted back to last year’s letter grades. With the highest ESL population, and the highest free and reduced poverty rate here in our county. With those two factors against us and we have an incredibly high special education population as well – so with all of those things going against us, we are still getting the job done.

When asked what parts of RTI contributed to their successful IREAD-3 scores, those interviewed identified three key factors. The first factor was small group instruction. A first grade teacher shared, “And just being able to meet in that small group setting really helps the students. That’s probably the big thing. Just to get kids more focused and not get lost in the big group.” The principal added, “Our small groups and the interventions and the one-to-one workings with these kids I think is absolutely what’s getting the achievement results done.” The fact that the RTI interventionist paralleled what the classroom teachers were doing in her small group instruction was also discussed as a factor contributing to the small group success. The second factor was Reading Recovery. A first grade teacher shared, “I would say that Reading

Recovery really helps. I see a lot of growth of students in that program with one-on-one instruction." Finally, the early identification and early intervention of RTI. The intervention specialist added, "Start so young & push it younger. Higher numbers younger. Great teaching staff. We're supported by our administrator."

**Rural School Findings**

Through the case study process of interviews, observations, and document review, the following findings were determined:

1. The principal was not aware of the universal screening tools that were used in the RTI process.
2. Teachers reported limited professional development opportunities. The main training they received was through the adoption of the basal reading series.
3. The university advisor attended the monthly RTI meetings, provided professional development to those providing interventions, and helped monitor the fidelity of implementation. The staff remarked that this has been a valuable support.
4. The general education staff was not aware of what happens in special education.
5. Over the past couple of years, the district has cut back the number of interventionists due to funding concerns.
6. The school utilizes the common RTI intervention framework of assigning all support services at the same time to a given grade level.
7. The school does make small group instruction a priority.
8. Observed instruction did not always match their intended goals to improve reading.
9. The funds that are dedicated to RTI are the state's Early Intervention Grant and funds from Title I.

10. The school was not able to provide any supporting documents for RTI (i.e.: guidance documents, policy documents, procedural documents, etc.). Such documents help provide the needed clarity that some staff members felt was lacking.

## Comparison of the Urban and Rural Schools

In this final section, I compare and contrast the two Title I elementary schools, with the primary difference being context.

### Demographics

Both elementary schools were high performing, had received an "A" letter grade, had a high percentage of students passing the IREAD-3 assessment, and was a finalist for or received the honor of Title I Distinguished School. Lancer Elementary (491 students) was twice the size of Green Valley (217 students). Both schools were considered high poverty and had approximately 80% of its students qualifying for free or reduced lunches. Lancer had a diverse population with an even mix of white, African American, and Hispanic students. Green Valley was primarily white (77%) with 16% Hispanic students. Green Valley had a very high transiency rate. Green Valley also had a higher percentage of students identified in special education (19%) compared to the urban school (10-11%).

### RTI Process

Both schools follow a very similar RTI process: Teachers start by trying various Tier 1 interventions in the classroom. When students do not show adequate grows with these interventions, the teacher fills out RTI referral forms and turns the student over to an RTI Team. The RTI Team convenes to discuss the student's data and to recommend Tier 2 interventions. The teams then hold follow-up meetings to monitor the student's progress. The urban school had experienced a shift in their RTI focus from academics to behavior due to an influx of severe

behavioral needs in students at a younger and younger age. This same issue was not discussed at the rural school.

**Universal Screening**

Both schools utilized a variety of universal screening tools. Lancer primarily utilized NWEA, Lexia, and district developed standards-based Checkpoints. Some teachers also utilized Running Records, DIBELS, SRI, TRC, and DRA. Green Valley primarily utilized Acuity, mClass, and TRC, which were provided by the IDOE. Some teachers also utilized Marie Clay Oral Language, the observation survey from Reading Recovery, and a kindergarten screening assessment. Based on the interview data, Lancer's principal had a much stronger understanding of the universal screening tools utilized as compared to his rural counterpart. Both schools maintained a data wall that tracked students' growth on universal screening assessments. Both schools conducted data meetings following each universal screening window. Lancer conducted monthly data meetings facilitated by the principal and school data specialist. Quarterly meetings also occurred to discuss the results of the district's Checkpoint Assessments. The urban school used to have a formal process to meet regarding the data wall, but that process had become more informal in the recent years due to staff turnover. Green Valley's process was more informal. The faculty regularly updated their data wall, but did not have a formal process to discuss that data. Both schools shared and discussed data as part of their RTI Team meeting process.

In both schools, the primary universal screening assessments were selected at the district level. A majority of the teachers in both buildings could not articulate how the assessments were selected or how much teachers were involved in the process. Lancer provided more consistent professional development on the screening tools during in-house sessions conducted by the

District Data Specialist. The majority of staff interviewed in both buildings were not aware of any formal processes to monitor for the fidelity on the universal screening assessments.

**Tier 1**

The Lancer faculty were able to discuss the curriculum and supports provided by teachers at Tier 1 with more depth, likely because they had a more consistent framework for delivering Tier 1 instruction. This started with the principal's basic expectation that every teacher met daily with every student during small group instruction. Tier 1 entailed a consistent 90 minute reading block focused on reading skills, and struggling readers received a daily second dip in small group reading instruction. The teachers utilized a variety of formative assessment data to form the small instructional groups. In Green Valley, classroom teachers implemented Tier 1 interventions and utilized small group instruction. However, the Tier 1 curriculum and instruction was not as consistent from teacher to teacher and reading instruction instead focused on writing, grammar, and spelling.

In both schools, Tier 1 interventions were primarily provided by the classroom teacher and consisted of additional small group instruction. Green Valley utilized a framework in which all available staff (special education, EL, Title I, RTI) focused on one grade level at a time. While identified students were pulled out for services, the teacher provided additional small group instruction. Lancer had a larger number of instructional assistants at its disposal and primarily pushed those services into the classrooms that had the highest needs.

Neither school had a well-defined process to provide ongoing professional development in reading instruction for staff members. Both relied on the training that was provided with the adoption of the basal textbook series. However, there was not a process to address the need for additional training due to staff turnover. Both schools also lacked a well-defined process to

monitor the fidelity of Tier 1 instruction and interventions. Both schools relied on the classroom walkthroughs and observations associated with the teacher evaluation process.

**Tier 2**

Both schools utilized a similar process for moving students from Tier 1 to Tier 2. The process started with the teacher completing an RTI documentation form and submitting it to administration. The student was then assigned to an RTI Team for further discussion. The RTI Team would discuss the students, data, strengths, weaknesses, family life, and other pertinent information. The team would then assign an intervention and conduct follow-up meetings to monitor the student's progress.

The two schools differed greatly on the types of interventions used at Tier 2. Lancer primarily utilized L.L.I. and Lexia reading software. These interventions were delivered by the classroom teacher, Title I reading interventionist, or instructional assistants daily for 20-40 minutes. Green Valley primarily utilized one-on-one Reading Recovery instruction delivered by the Reading Recover teacher daily for 30-40 minutes or small group instruction delivered two times a week for 30-40 minutes delivered by an instructional assistant. Both schools provided ongoing professional development for the staff members delivering an intervention. In Lancer, it was provided by the Title I reading interventionist, and in Green Valley it was provided by the university advisor.

Both schools progress monitored their Tier 2 students on a regular basis. Lancer primarily utilized the progress monitoring tools built into their interventions on a weekly basis. If a tool was not built into the intervention, they utilized DRA, SRI, or DIBELS. In Green Valley, the RTI specialist conducted progress monitoring every Friday by giving the students a one minute reading passage for fluency and comprehension. In both schools, it was the RTI

Team that examined this data to determine if the student is making adequate progress. If the student did not make adequate progress after trying a couple different interventions, then the student was referred by the team to Tier 3.

**Tier 3 and Special Education**

In both schools, Tier 3 equated to special education testing and services. Each school utilized interventions tied to the student's IEP goals. These interventions were often teacher created; however, Lancer did mention the use of Ortin Gillingham. Both schools provided services through special education teachers and special education instructional assistants. Lancer provided services at least four days a week for 20-30 minutes, while the rural school provided services daily for 35-45 minutes. In both cases, professional development was provided for the staff by the school and district. Both schools provided progress monitoring on the student's IEP goals and a case conference committee determined when or if an intervention needed to be changed. Neither school had a specific process for monitoring for the fidelity of implementation. Again, they both relied on the classroom walkthroughs and observations conducted by the principal.

In both Lancer and Green Valley, a majority of the staff indicated that the RTI process had decreased the number of students identified into special education, and that the results for those that were tested were more reliable due to the data collected throughout the RTI process.

**Staff Collaboration**

Both schools had a similar process for staff collaboration. Informal grade level collaboration during common grade level prep times, lunch, and passing periods was the primary process. The principal at Lancer did expect that each grade level team submit a collaboration record form after each collaboration session. Both schools also conducted a more formal data

meeting after each universal screening assessment window. The school principal led these meetings. The screening data were also captured on a data wall in each building. In both cases, the data wall was utilized to monitor and discuss student growth over the course of the school year. Neither school utilized specialized software to support this data collection. However, the rural school was in the process of implementing a data warehouse tool. In the meantime, both primarily utilized Google Docs and spreadsheets to manage their RTI documentation and data.

**Special Considerations**

Both schools relied on the IDOE's Early Literacy Grant and federal Title I funding to support the implementation of RTI. However, the schools allocated personnel resources differently. In Lancer, the principal assigned personnel to support RTI on an as needed basis. Only the grade levels showing the greatest need received additional instructional assistant support. In Green Valley, each grade level received the same support for a set amount of time, typically 35-45 minutes. There was a mixed response concerning building level support for RTI implementation. In Green Valley, those interviewed all expressed positive support from the principal. However, in Lancer, a couple teachers expressed concerns for how the process had changed in recent years – not as formal or consistent as in the past. They felt that was primarily due to the school's shift in focus from academics to behavioral issues in the RTI process. Lancer also expressed a decline in support for RTI at the district level. It was shared that there was significant support early in the implementation process, but that support was not currently as visible. Green Valley greatly appreciated the ongoing support of the university advisor that was provided by the district.

**Barriers to Implementation**

The two schools varied greatly on the identified barriers for successful RTI implementation. See Table 4.3 below:

Table 4.3

*Major Barriers for Implementation*

| Urban School | Rural School |
|---|---|
| Getting teachers on board | Getting people on board and understanding what RTI is and is not |
| Teachers wanting to go straight to special education testing | Not having the interventionist every day |
| Teachers not wanting to complete all of the RTI documentation | Funding |
| Time | |
| Getting parents on board and understanding the RTI process | |
| Transient students | |
| Understanding data and how to use it to make instructional decisions | |
| Dealing with more severe behavioral issues | |

They also varied greatly on what they would do differently if they implemented RTI again. See Table 4.4.

Table 4.4

*What would you do differently?*

| Urban School | Rural School |
|---|---|
| Utilize some of the aspects from the old GEI process | Use a certified teacher for Tier 2 interventions |
| More professional development | More professional development on understanding RTI |
| More consistency | Have a full-time interventionist at Tier 2 |
| More support and direction from the IDOE | |
| Hold people more accountable | |

In both schools, a majority of the staff felt that RTI was working based on their improved student growth data on the universal screening assessments and IREAD-3. However, four of those interviewed in the urban school felt that the old GEI process worked better than the current process. There was a general feeling that some of this was due to the school's shift in focus from academics to behavioral issues in the RTI process. Both schools identified similar factors in the RTI process that contributed to their success on IREAD-3. See Table 4.5.

Table 4.5

*What parts of RTI do you contribute to the successful IREAD-3 scores?*

| Urban School | Rural School |
|---|---|
| The early identification and early intervention of RTI | The early identification and early intervention of RTI |
| Small group instruction at Tier 1 & 2 | Small group instruction at Tier 1 & 2 |
| The school's focus on data and using that data to make instructional decisions | Reading Recovery |
| The teams work well together | |
| A culture that they never give up on a student | |

In the next chapter, these findings for the rural and urban school will be discussed in relation to the research questions for this study, and how the finding could impact practice, policy, and future research studies.

# CHAPTER FIVE

# CONCLUSIONS

This chapter includes (a) results and summary of the study; (b) considerations for policy and practice; and (c) recommendations for additional research. Connections between findings and the scholarly literature are embedded within this chapter.

## Summary of the Study

### Purpose

The purpose of this qualitative case study was to examine the RTI implementation in two Title I elementary schools from two Indiana school districts that achieved growth between March, 2012 and March, 2015 on the IREAD-3 assessments or consistently had 80% or higher of the students passing IREAD-3. The study analyzed what factors made their RTI implementation and performance on the state's IREAD-3 reading assessment successful and identified implementation concerns in the following areas:

- Implementation and general understanding of the core components of RTI.
- Implementation of systems or processes for monitoring the fidelity of implementation.
- Implementation of a universal screening, progress monitoring, and problem-solving method for data-based decision making within the multi-tiered model.
- Access to and use of research-based, scientifically validated instructional and intervention strategies.
- Professional development on each component of RTI for all stakeholders.
- Alignment between RTI's early identification and intervention and identification of students with specific learning disabilities.

**Participants**

This study identified two Indiana Title I elementary schools nominated for or receiving the Indiana Title I Distinguished Elementary School Award, one rural and one urban, and successfully implementing RTI. Within each elementary school, a sample of educators was selected for open-ended interviews and classroom observations. The sample of sixteen participants consisted of one administrator, two primary teachers, two intermediate teachers, one special education teacher, one interventionist (if applicable), and one counselor (if applicable) from each building.

**Procedures**

Data were collected through open-ended interview questions, classroom observations, and a review of relevant documents. Through semi-scripted interviews with the sixteen participants, I presented open-ended questions to collect detailed responses concerning the implementation of RTI within each participant's school. During each interview, notes were taken and the verbal responses were audio recorded. The interview questions (See Appendix A) focused on the implementation of the key RTI components under study: screening, progress monitoring, tiered instruction and interventions, collaboration, professional development, and monitoring for fidelity.

Extensive field notes were taken during classroom observations of forty-five to sixty minutes in length within the two primary classrooms, two intermediate classrooms, and with the interventionist and/or special education teacher. These field notes documented teacher/student interactions, instructional or intervention strategies, behaviors, actions, teacher collaboration during RTI Team meetings, and any other relevant data.

The data were analyzed using a combination of inductive and deductive coding (Miles & Huberman, 1984). As field notes from interviews, observations, and documents were transcribed, I utilized coding and memoing to analyze and group the data into common themes. As the research progressed, I triangulated the data from the memoing of open-ended interviews, classroom observations, and review of RTI documents to identify key trends in the RTI success of the identified elementary schools. These findings were presented in Chapter Four. Based on the themes identified in Chapter Four, I developed responses to each of the four research questions.

**Research Question One:** ***How are the identified schools utilizing and monitoring for the fidelity of implementation of all core components of RTI identified by Lembke et al. (2010)?***

The core RTI components identified by Lembke et al. (2010) are: administrative and staff support; establishment of school-based problem-solving teams; selection of an evidence-based, formative assessment system that includes screening and progress monitoring; examination of the core academic program currently in place to make sure it is meeting the needs of the majority of students; team analysis of school-wide data and placement of students in tiered instructional groups; identification of interventions for Tier 2 and 3 and a schedule for implementation of the tiered interventions; determination of how fidelity of treatment for Tiers 1-3 will be assessed; determination of professionals who will monitor the progress of students in Tiers 2 and 3 on a frequent basis, including by setting goals, collecting data, implementing data-decision rules, and making changes in instruction. Findings for each component follows.

**Administrative and staff support.**

Both schools lacked consistent, intentional, and ongoing professional development provided across the board for administrators and staff on all of the core elements of RTI

implementation. Although each school provided staff with professional development on various aspects of RTI and the core curriculum, a more focused approach or planning could generate greater buy-in from staff, more consistency or fidelity in implementation, and higher achievement results. This structured professional development can also help avoid unintentional consequences, such as ineffective use of instructional time or a lack of teacher autonomy (Mellard et al., 2010; Foorman, 2007).

In Lancer Elementary, the district Data Specialist provided some ongoing support in the implementation and analysis of universal screening and progress monitoring tools such as NWEA and Running Records. However, one of the major barriers identified by those interviewed was teachers' understanding of data and how to use it to inform instruction. The district also provided some support on the core reading program with training on their adopted reading series, the Readers' Workshop Model, and a program called, The Daily 5. Some of this training came through the school's involvement with Reading First. However, follow-up training to support new staff members was lacking. Staff members that deliver Tier 2 interventions were trained annually by the Title I reading interventionist. Tier 3 is considered special education at Lancer; therefore, the special education teachers and paraprofessionals received a limited amount of annual training support from the district, as well as, some training within the school.

At Green Valley Elementary, there was inconsistent professional development provided to staff members on the implementation and analysis of universal screening and progress monitoring tools. The principal shared that she had to learn to interpret the data on her own through Master's Degree courses and "trial by fire". The staff also received very limited training on Tier 1 reading instruction consisting of only the training provided by the outside vendor when

a new reading series was adopted. This lack of training was also obvious during classroom observations. There was no consistency with Tier 1 instruction across the grade levels, other than the school's focus on small group instruction. For what Green Valley lacked in support of screening, data analysis, and Tier 1 reading instruction, they made up for it with their support for Tier 2 and 3. Green Valley implemented a model in which they partnered with a local university and a university faculty member attended all of the RTI Team meetings at Green Valley. This faculty member also provided ongoing training and support for those teachers and paraprofessionals at Tier 2 and Tier 3. The university advisor provided training on the interventions and the progress monitoring tools. Since Tier 3 was also special education at Green Valley, the district's Special Education Director also provided ongoing support for the special education staff.

One of the major barriers to implementation identified by both Lancer and Green Valley was getting staff on board and understanding the RTI process. This lack of understanding of some of the core components of RTI was evident in both buildings. For example, teachers in both buildings could not clearly distinguish between the three tiers of RTI. When asked about services for students at the various levels, they would often confuse the tiers in their answers. This relates back to the lack of consistent professional development and teacher's involvement in the overall process. Teachers in both buildings were not heavily involved in the entire RTI process – selection of universal screening tools, defining the RTI processes and framework, understanding data and progress monitoring, identifying and utilizing interventions, and in identifying ongoing professional development. It is easier to get staff "on board" with the process and understanding it if they were involved in the development and oversight of the entire

framework, including professional development (O'Conner & Freeman, 2012; Ehren, 2013; Robinson et al., 2013; Burns et al., 2013).

Additionally, the principal at Lancer shared that he wanted more support and direction from the state early in the implementation process. Early on in the implementation process of RTI for the state of Indiana, the Indiana Department of Education formed an RTI Leadership Team. The original task of this team was to provide direction and support for school districts implementing RTI. However, as the process was starting, there was a change in the State Superintendent for Public Education from Dr. Reed to Dr. Bennett. The new state superintendent wanted to take a hands-off approach and leave the implementation to each individual school district. Unfortunately, there was a fundamental paradigm shift within the IDOE from an entity that provided school districts with support, to one that solely held districts accountable for results. Therefore, the IDOE's RTI Leadership Team was quickly disbanded leaving a large gap in implementation support for schools across the state.

**Establishment of school-based problem-solving teams.**

Both schools utilized school-based problem-solving or RTI Teams in their framework. Each school had a core team made up of several consistent staff members from different areas within the school. The team then invited teachers and other staff members to join the meetings on an as needed basis. At Lancer, the core RTI Team was chaired by the Dean of Students and met monthly. At Green Valley, the team was chaired by the principal with help from the university advisor. They also met monthly, but alternated months for grades K-2 and grade 3-5. Lancer Elementary primarily utilized the problem-solving model within their framework instead of the Standard Treatment Protocol or Hybrid Models. Green Valley fell more along the lines of

the Standard Treatment Protocol Model focusing interventions between the reading interventionist and the Reading Recovery teacher.

**Selection of an evidence-based, formative assessment system that includes screening and Progress Monitoring.**

As noted by Johnson et al. (2006), screening serves as a gateway into the tiered support systems within the RTI framework. Universal screening data is used to evaluate core curriculum at Tier 1 and identify the small groups of students needing additional support at Tier 2. Progress monitoring begins at Tier 2 to evaluate the interventions utilized and to identify the individual students that need more intensive interventions at Tier 3.

Lancer had a well-defined evidence-based system for universal screening. Lancer utilized NWEA as their primary assessment tool which is a nationally normed formative assessment system. NWEA was given to all students three times a year. Lancer faculty also utilized Lexia reading software assessments throughout the year and district created checkpoint assessments on a quarterly basis to monitor students' mastery of Indiana Academic Standards. Lancer also utilized additional formative assessments for progress monitoring such as, Running Records, DIBELS, SRI, TRC, and DRA. The frequency of the progress monitoring depends on the student and the intervention. Most were given weekly or every other week. Lancer's universal screening and progress monitoring assessments were selected at the district level. Most of those interviewed were unsure about the amount of teacher input into that selection process. However, they did help write the curriculum assessed by the checkpoints.

Green Valley also utilized several evidence-based tools in their assessment system. For universal screening, their primary tool was mClass and TRC. They also utilized Acuity, Marie Clay Oral Language, Observation Survey from Reading Recovery, and a Kindergarten Screening

Assessment. mClass, TRC, and Acuity were given three times a year. The other assessments were given on an as needed basis. Four of the eight staff members interviewed did not know how these assessments were selected. The remaining four indicated that the assessments were selected by the district. Again, participants were unsure about the level of teacher input into those selections. Districts can increase teacher buy-in and the fidelity of implementation by increasing the involvement of teachers in the decision-making process (Burns et al., 2013; Castro-Villarreal et al., 2014). For progress monitoring, Green Valley utilized DIBELS, Running Records, and one minute reading passages for fluency and comprehension given by the Tier 2 reading interventionist. These were typically given on a weekly basis.

**Examination of the core academic program currently in place to make sure it is meeting the needs of the majority of students.**

Although both schools had systems in place to examine the core academic program and whether it was meeting the needs of a majority of students, there was a great discrepancy between the two schools on the implementation of a research-based or evidence-based core curriculum. Both schools utilized a data wall that tracked the students' performance over time on the universal screening assessments. However, neither school had formalized structures in place to hold consistent school-wide data discussions. Lancer had a structure in pace at one time, but had moved away from the practice of formalized school-wide data discussions. Both schools conducted informal discussions concerning the data, typically within grade level meetings.

While both schools utilized screening data to identify students that would benefit from further support within the multi-tiered system, they did not have formal structures in place to analyze the data while considering the strengths and weaknesses of the core curriculum and instruction provided to all students at Tier 1. A distinct advantage of RTI that these two schools

were not capitalizing on is its ability to improve student performance by creating tighter links between the curriculum, instruction, and assessments (Fuchs, Fuchs, & Vaughn, 2008). Concerning its core curriculum, Lancer did utilize a consistent research-based model for reading instruction. Every teacher at all grade levels implemented all of the components of the Readers' Workshop Model focusing on Guided Reading (Fountas & Pinnell, 2012). Green Valley did not have a consistent model. Some of the primary teachers utilized aspects of the Readers' Workshop Model, but lacked the training and support to implement it with fidelity. The intermediate grades used an assortment of strategies, most of which were not evidence-based. This will be discussed further in upcoming sections.

**Team analysis of school-wide data and placement of the students in tiered instructional groups.**

Both schools utilized a two-step process to address this component. At Tier 1, grade level teams analyzed screening data to guide small group instruction and interventions within Tier 1. For the students not showing adequate growth at Tier 1, both schools utilized an RTI Team to further explore individual student's data and to place them within the appropriate interventions at Tier 2. Both schools also utilized their RTI Team to discuss students that were not showing adequate growth at Tier 2 and determining if the student needed referred for special education testing at Tier 3.

**Identification of interventions for Tier 2 and 3 and a schedule for implementation of the tiered interventions.**

As noted by Fuchs, Fuchs, and Vaughn (2008),

> When selecting or developing secondary interventions, it is critical to remember that in a relatively brief amount of time (typically 20-30 minutes for 10 to 20 weeks) we hope to have students "catch up" with their peers. For secondary interventions to be effective

> instructional time, interventions need to be highly focused and aligned with the primary instruction as well as the needs of the students. (p. 58-59)

This tight alignment described by Fuchs et al. between Tier 1 instruction and Tier 2 or 3 interventions takes a team effort and a system in place for ongoing collaboration between the classroom teachers and those planning and delivering the interventions.

This process is easily accomplished within Tier 1 because it is typically the classroom teacher that is providing additional interventions to small groups of students within his/her classroom. The teachers at both Lancer and Green Valley provided one-on-one instruction or additional small group instruction to the students that were struggling with the Tier 1 curriculum. This was typically done during the 90-minute reading block and intervention times that were scheduled within the day.

Both schools' Tier 2 interventions were selected at the district level. Lancer Elementary primarily utilized Leveled Literacy Intervention (L.L.I.) developed by Fountas and Pinnell out of Ohio State University and Lexia Reading Software. L.L.I. is one of the most effective reading interventions in the country (What Works Clearinghouse). When implemented with fidelity, students can attain two years of reading growth in one year (Ransford-Kaldon et al., 2010). Green Valley utilizes a program called PALS delivered by the reading interventionist or Reading Recovery delivered by the Title I teacher. Reading Recovery is a highly effective program (McGee, 2016), but can be very cost prohibitive because it requires a full-time teacher to work all day with one student at a time for 40 minute blocks.

Both schools utilized the same model for scheduling Tier 2 interventions. The schools assigned all of their interventionists to a specific grade level for a set amount of time during the day. At the end of that time, they moved to the next grade level, and so on. This model maximizes the limited amount of support staff available for RTI and classroom disruptions that

can be created by pulling students out for additional services and support. The only difference was the amount of grade levels covered. Green Valley sent the support staff to every grade level for a set amount of time. In Lancer, the interventionists were only sent to the grade levels identified with the greatest need based on the screening data.

**Determination of how fidelity of treatment for Tiers 1-3 will be assessed.**

RTI implementation is a complex process with a great deal of moving and inner-related parts. The only way an instructional leader can ensure that all aspects of RTI are working harmoniously and functioning at a high level in order to improve implementation and student performance is to develop structures to monitor for fidelity of the implementation (Keller-Margulis, 2012). According to Schmoker (2016), "Leaders must never make the mistake of thinking that essential practices are so ingrained that they no longer need to be monitored" (p. 24).

Although both elementary schools had strong instructional leadership that was dedicated to the implementation of RTI to increase the achievement levels within his/her building, neither school had developed procedures or processes to tightly monitor the fidelity of implementation of the core components of RTI. When asked what procedures were in place, both principals fell back on the school's teacher evaluation model in which he/she conducted ongoing classroom walkthroughs and one or two extended observations each year. Although this can aide in the monitoring for fidelity of the delivery of Tier 1 instruction and Tier 2 or 3 interventions, it does not account for delivery and scoring of universal screenings or progress monitoring assessments, selection of interventions, and data-based decision-making procedures within the RTI framework. However, Green Valley utilized their university advisor to assist with the

monitoring of fidelity of the Tier 2 and 3 interventions and progress monitoring which gave it a distinct advantage over Lancer.

**Identification of staff members responsible for monitoring the progress of students in Tier 2 and 3 on a frequent basis, including goal setting, collecting data, implementing data-decision rules, and making changes in instruction.**

Within both schools, progress monitoring fell upon the members of the RTI Team. Both school's teams met on a monthly basis to discuss the individual students' goals, data, and interventions. This information, along with other relevant information shared by the teachers or parents, was utilized to make educational decisions.

**Research Question Two:** ***What written policies, written procedures, resources, guidance documents, or professional development plans has the district and/or building level leadership established as a framework for implementing and sustaining RTI, and how do the documents describe the fidelity of RTI implementation?***

Guidance, policy, and procedural documents help provide clarity and repetition, especially when dealing with staff turnover. According to Schmoker (2016), "All teachers need and deserve leaders who make strenuous efforts to clarify and continuously communicate the most essential concepts and practices. They need leaders to do this with precision and – just as important – repetition" (p. 20). In his book *Good to Great* (2001), Jim Collins also discussed the need for leaders to focus their attention on the critical components to be implemented and eliminate the "extraneous distractions".

Neither school was able to produce any written policies, written procedures, resource documents, guidance documents, or related professional development plans. Although both schools were implementing RTI components and reaping benefits from that implementation,

policy, procedural, and guidance documents (with supporting professional development) could have led to improved understanding and fidelity of that implementation. This consistency and clarity could lead to even greater success in student achievement (O'Conner & Freeman, 2012; Keller-Margulis, 2012). When attempting to create these documents, there are numerous high-quality samples provided by other school districts and organizations focused on RTI implementation, such as The National Center for Response to Intervention (rti4success.org), The RTI Action Network (rtinetwork.org), The IDEA Partnership (ideapartnership.org), Oklahoma State Department of Education, or the Rochester City School District (rcsdk12.org).

Monitoring for fidelity of implementation is a critical component for any RTI framework. As shared by Benjamin (2009), "When good quality learning is combined with clear expectations, quality professional development, a method of tracking deployment, and appropriate recognition, real improvement can be achieved" (p. 40). Many schools, including Lancer and Green Valley, lack the procedures to monitor for fidelity (Keller-Margulis, 2012; O'Conner & Freeman, 2012; Robinson et al., 2013; Burns et al., 2013). This can be achieved when a school utilizes implementation rubrics and checklists to provide the clear expectations, combined with what Benjamin (2011) calls System-to-System Meetings (S2S). In an S2S Meeting, one level of the system meets with another level to discuss data and the implementation of interventions. For example, the principal meets with a classroom teacher to discuss his/her reading screening or progress monitoring data and how identified interventions are being implemented for targeted students. These S2S meetings are also held between Central Office staff and the principal, and between teachers and students. This is a simple, but very effective way to monitor for the fidelity of implementation.

**Research Question Three:** ***What process do the identified schools utilize to identify the research-based, scientifically validated instructional and intervention strategies used within the multi-tiered model?***

Both schools indicated that a majority of the core curriculum and interventions were selected at the district level, but those interviewed were not aware of the degree of teacher input or the process utilized to make those decisions. Green Valley's Tier 1 reading program was not as developed as Lancer's program. It was obvious from the classroom observations that Lancer had spent a great deal of time and resources focusing on their Tier 1 reading instruction, with an emphasis on small group instruction and interventions. All teachers observed provided instruction through the Readers' Workshop Model utilizing whole group mini-lessons, small group instruction, shared reading, interactive read alouds, stations focused on the mini-lesson concept, and large amounts of independent reading. Their dedication to small group instruction was also evident in their interventions, with the use of Fountas and Pinnell's Leveled Literacy Intervention (LLI). Again, the principal felt that this focus and success was tied to the school's implementation of the Reading First Model several years prior.

Green Valley did not have a "guaranteed and viable" curriculum (Marzano, 2001) for reading instruction at Tier 1. Reading instruction at Green Valley was very inconsistent from grade level to grade level. Even though the primary grades utilized some aspects of the Readers' Workshop Model, reading instruction predominantly focused on non-reading skills like grammar, writing, and spelling. The intermediate grades did not follow the Readers' Workshop Model, but did focus on some small group instruction. However, like the primary grades, the lessons did not focus on specific reading skills. The intermediate grades relied heavily on worksheets, which is not a best practice strategy. In the words of author and national educational

consultant Susan Kovalik (2010) in a presentation to teachers at the National Schools Exceeding Expectations Conference, "No significant learning has ever occurred from a worksheet."

During the interview and observation, the third grade teacher at Green Valley also discussed her fondness for ability grouping for reading and mathematics. Ability grouping is not a research-based best practice. In fact, Zemelman, Daniels, and Hyde (1998), found that the practice is harmful to students.

> One of the signal contributions of recent educational research has been the explicit rejection of tracking and the affirmation of heterogeneous grouping. One of the most shameful and unnecessary practices in American schools has been the routine division of children into separate classrooms on the basis of "ability". …We now have conclusive evidence that such ability grouping is academically *harmful* to kids labeled low and middle – their measured achievement is depressed when they are segregated by level. The evidence of tracking's benefits for "high" kids is slight, ambiguous, and still under debate among achievement researchers. (p.258)

My observations in this third grade classroom were a little unsettling. The teacher was very antiquated in her approaches to students and instruction, and did not treat the students well. One observation occurred while students that needed services were pulled and the remaining students were supposed to read silently. The teacher constantly reprimanded students that were seemingly off-task. The students had no accountability for what they read. Independent reading should always be accompanied with some type of accountability for the purpose of informing instruction and assessment, such as journaling in a Reader's Response Journal (Fountas & Pinnell, 2006). During the second observation during her reading block, the teacher assigned numerous worksheets and primarily worked on grammar instead of reading strategies. Several poor practices, such as Round Robin Reading were also observed. Fortunately, this was isolated to this one third grade teacher.

Both schools utilized some research-based Tier 2 interventions. Lancer primarily utilized Lexia Reading Software independently and L.L.I. in small groups. Green Valley's Tier 2

students either worked in small groups with the RTI interventionist or one-on-one with the Reading Recovery teacher. When observing the interventionist, she mostly focused on grammar, vocabulary, and phonics instead of reading fluency and comprehension strategies. In contrast, when observing the Reading Recovery teacher, she focused on reading skills such as fluency, comprehension, author's purpose, or main idea. However, the teacher only met with one student for approximately 30 minutes. Although this can have a large impact on these individual students, only a small percentage of the population can receive these services. Therefore, Reading Recovery has proven to be a very expensive form of intervention. Both schools utilized proven intervention strategies at Tier 3 tied to each student's IEP goals, such as Lindamood-Bell or Ortin Gillingham.

**Research Question Four:** ***How do teachers involved in RTI perceive the impact of RTI's early identification and intervention on the identification of students with specific learning disabilities?***

A majority of those interviewed in each school indicated that the number of students identified as SLD had decreased with the implementation of RTI. They contributed RTI's early identification and early intervention, along with a greater focus on data, to that decrease. Both schools also indicated that when a student goes through the RTI process, is referred to special education, and tested for special education, the results of that testing was more reliable due to all of the data collected during the process. This aligns with the research, "Specifically, researchers consistently found that the discrepancy model did not differentiate so-called students with LD from low-achieving poor readers, was not consistently implemented, lacked adequate psychometric properties, and did not inform instruction (NASDSE, 2007)."

## Implications for Practice

During the course of this qualitative study, a number of practices came to the forefront that can be replicated to potentially improve a school's RTI implementation. The first priority in implementation is building a school culture where every staff member believes that all students can and will be successful given the right amount of time and support (O'Conner & Freeman, 2012). A culture where teachers never give up on students, regardless of how challenging the student's academic or behavioral needs may be on a daily basis. Lancer elementary took pride in establishing this school-wide culture. As stated by the Lancer principal,

> We never give up on kids. I think the culture and the climate of high expectations for our students and that we're not going to give up on kids and that we have to find the intervention that will help them be successful is the key. And we never give up. We just keep moving…and that could be Tier 3 but we're going to continue that journey until this child is successful. I think that is why we are doing so well.

The second highest priority is a focus on establishing research-based or evidence-based Tier 1 curriculum and instructional practices. Schools will get the greatest benefit when they focus most of their time and resources on ensuring what Marzano (2001) calls a "guaranteed and viable curriculum" at Tier 1. A research-based core curriculum and instructional strategies will reduce the number of students that need additional services and resources at Tiers 2 and 3. As shared by Noll (2013, p. 57), "Thirty minutes of intervention can't make up for poor classroom instruction during the other five to six hours of the school day." This focus on quality Tier 1 instruction was evident at Lancer Elementary where every teacher consistently implemented all of the components of the Readers' Workshop Model, with an emphasis on small group instruction.

Both Lancer Elementary and Green Valley intentionally focused on small group reading instruction at Tier 1 and 2, and contributed a great deal of their success to this practice.

Collaborative small group instruction has been shown to produce solid achievement gains in all content areas (Zemelman et al., 1998). This small group instruction encourages differentiation of the curriculum and skills needed to be successful readers. According to Fountas and Pinnell (2013),

> In a comprehensive approach to literacy education, small group teaching is needed for the careful observations and specific teaching of individuals that it allows, as well as for the efficiency in teaching and the social learning that benefits each student. (p.11)

However, these small groups must be flexible in nature so students are not locked into long-term groups based on ability, which is harmful to students (Zemelman et al., 1998; Tomlinson, 2001). Although, both schools had gaps in their RTI implementation or core curriculum and instruction, both schools were identified or nominated as Title I Distinguished Schools and had success on the state assessments, such as IREAD-3. A great deal of this success might be attributed to the two school's focus on small group instruction, data to inform instruction, and the early interventions of RTI. Lezotte and Pepperl (1999) described the benefits that can be achieved by embedding just a couple evidence-based strategies into daily practice throughout the school, "If you can get a school to do a few things and do them with fidelity and with some depth, we're going to get a higher yield than if we scramble 1,000 different ideas" (p. 128).

Green Valley's use of a university advisor was another practice schools might consider replicating. The advisor attended every monthly RTI Team meeting to help guide the process, analyze data, and determine the best intervention for each student. She also provided ongoing professional development on interventions and progress monitoring tools. Partnering with faculty members at a local university has a great deal of potential to open doors for a school districts, especially small rural districts, to outside expertise that can assist with implementation, professional development, and monitoring for fidelity.

Both Lancer and Green Valley were intentional in their use of screening data to inform instructional decision-making. Both schools posted a data wall containing screening information on individual students. That information was updated after each screening window. The information was structured in a format that showed whether the student was performing at grade level, below grade level, or above grade level at that point in time. However, from observations, the true power behind a data wall is the conversations that instructional leaders have with teachers concerning the data and what to do with the data. These conversations need to focus on results (DuFour & Eaker, 1998; Schmoker, 1999; Schmoker, 2006). Leaders can generate valuable discussions by asking the right questions, such as: "I see that you have five students identified in Tier 2 based off of NWEA. What interventions are you implementing for these students? Is the intervention working? How do you know it is working?" Conversations like this can give an instructional leader a good read for the fidelity of implementation of both assessments and interventions.

When implementing RTI, schools need to continually look for ways to refine and simplify the process for maintaining all of the documentation required for RTI. A common barrier discussed at both schools was the amount of paperwork required by teachers when they referred a student to RTI. It was shared that this discouraged some teachers from taking a student that may benefit from the RTI services to an RTI Team meeting. Some teachers avoided referring students due to the burden of the paperwork. When possible, schools should streamline this paperwork to avoid this potential harmful reaction from teachers. The use of technology is one potential solution to this problem. The use of shared documents through tools like Google Docs or Google Sheets can spread the work load across a team of teachers instead of the responsibility falling to one. A tool like a data warehouse can also help a school more easily

manage the data that has to be gathered and discussed at RTI Team meetings. Instead of having to search multiple assessment sites, all of the data can be housed in one digital tool. As shared by O'Conner and Freeman (2012), "Without effective data management and analysis, even the best assessment data will not be useful to those trying to make educational decisions" (p. 303).

## Implications for Future Research

This qualitative case study provides a snapshot of the successful RTI implementation of two Indiana Title I elementary schools which facilitated substantial growth or performance on the IEAD-3 assessment. However, the complexity and changing landscape of RTI is full of additional opportunities for further research and development. This study focused on two Title I elementary schools nominated for or receiving the Indiana Title I Distinguished School Award, one rural and one urban. A study could be conducted expanding on this group. There are currently twenty-five elementary schools in Indiana that have received this award and numerous other schools that have been nominated multiple times. A school is selected for this award by showing exceptional student performance for two or more consecutive years or by closing the achievement gap between student groups. Future researchers might examine additional Title I Distinguished elementary schools to understand common elements in their RTI implementation and factors that have led to their success. This would identify instructional and intervention strategies that could be replicated in other elementary schools.

Monitoring for fidelity is considered a best practice strategy that leads to more consistent implementation and higher achievement results (Johnson et al., 2006; Keller-Margulis, 2012). Neither school had structures in place to fully monitor for the fidelity of implementation of all components of RTI. A more sustained study of schools successfully implementing RTI could be conducted to explore what practices or structures should be in place for administrators and

teachers to focus on fidelity. Are the schools utilizing tools such as rubrics or checklists, above and beyond the teacher evaluation model, to help monitor the fidelity of implementation? Are the instructional leaders collecting and discussing implementation data in formalized structures to hold staff accountable for implementation?

This was a qualitative case study utilizing interviews and observations to explore two school's success in RTI and IREAD-3. To get a broader sense of the relationship between RTI and IREAD-3, a quantitative research study could be conducted. Specifically, a study might be designed to test the correlation between IREAD-3 performance or the number of students being served at Tier 2 and factors such as percentage of free or reduced lunch students, special education students, minority students, or EL students. Research has shown that at least 80% of students should be successful at Tier 1 (NASDE, 2007a). For schools that have a high percentage of students needing services at Tier 2, is there a correlation to socioeconomic status or race? Is there a correlation to socioeconomic status or race and the percentage of students that pass IREAD-3? This could address underlying factors to student performance that schools are failing to notice or adequately address in their RTI frameworks.

Lancer Elementary has experienced an influx in behavioral issues within their RTI framework. A study could be conducted exploring research questions regarding behavioral issues such as: Are other schools experiencing this same change in focus? Are schools addressing the behavioral issues within their RTI framework or are they utilizing PBIS or MTSS to address the behaviors? What are the best evidence-based strategies for addressing behavioral and social-emotional concerns? Are schools that are utilizing adult mentors having greater success meeting their students' behavioral or social-emotional needs than schools that are not using mentors?

This study touched on funding and resources for RTI implementation, but more should be done in this area. How are schools utilizing Educational Funds, Title I, Title II, Title III, Title IV, and special education funds to support RTI/MTSS implementation? Are schools forming outside partnerships with the community or agencies to help provide services to students? How has funding changes at the state or federal level impacted staffing at the various tiers of services? School funding is always a moving target. Studying how other schools or districts that are successfully implementing RTI are utilizing their funding streams and resources would be valuable to those schools still struggling with implementation.

A lot of research has been conducted on supporting struggling students in reading and writing. However, that research base is not as prevalent in other content areas. What are the evidence-based strategies and interventions that best support students in mathematics and other content areas? Both Lancer and Green Valley contributed their small group reading instruction at Tiers 1 and 2 to their success on IREAD-3. Does small group instruction show the same benefits in mathematics and other content areas?

Both Lancer and Green Valley indicated that RTI has reduced the number of students identified as SLD. A more in-depth study could be conducted to understand if RTI affects the overall identification of students with SLD; is it decreasing the number of students identified? Does this decrease in identified SLD students negatively impacted schools' special education budgets? The study could also explore the issue of disproportionality. Does successful RTI implementation address and resolve the disproportionality issues that were identified with the discrepancy model?

## Implications for Policy

As stated prior, RTI is a complex and expanding landscape. While RTI was discussed in the reauthorization of IDEA in 2004, the terminology in recent policy has shifted to Multi-Tier System of Support (MTSS). National policy through the Every Student Succeeds Act (ESSA), mentions MTSS several times along with the term, "Schoolwide tiered model". Regardless of terminology, being embedded in national policy aides in the development of additional local, state, and federal policy to support its implementation at the school level. The Indiana Department of Education is currently ramping up its support structures to assist local schools in implementing the RTI/MTSS framework. The advantage that schools like Lancer will be able to benefit from is a greater focus on behavior and the social-emotional needs of students. MTSS combines the best of both RTI and PBIS into one inclusive model.

As districts work to implement RTI or MTSS, the policy work must trickle down to the school level. Policies can drive the paradigm shifts needed for school improvement. This is where local educational leaders and School Boards need to consider School Board Policies, the adoption of Core Values, and guidance documents that support the implementation of valuable reform efforts like RTI. Lancer and Green Valley lacked the policy and procedural documents, guidance documents, and resources that help support the successful implementation of the components of RTI. These policies and documents aid in the consistent implementation of the components across teachers, grade levels, and schools; as well as in the monitoring for fidelity of that implementation. As district and school leaders work with School Boards and teachers, policy and support documents need to be developed in a variety of areas. One of the first priorities is establishing a "Guaranteed and Viable Curriculum" (Marzano, 2003) at Tier 1 for all students in all content areas. The development of support documents such as Curriculum Maps

can provide this structure and consistency across teachers and departments (Schmoker, 2011; Jacobs, 1997).

Districts and school leaders must also provide more support in the area of professional development for administrators, teachers, and paraprofessionals. These professional development plans need to focus on all components of RTI and be ongoing in order to support staff turnover. District and school leaders should collaborate with teachers and staff members to identify the areas where additional professional development is needed in order to support implementation. Assessment and survey data can help inform this decision-making and planning process.

Policy and procedural documents should also be developed to provide additional time and support to assist school and district leaders in monitoring for the fidelity of implementation of all key components of RTI. These documents should provide clear implementation expectations through the development of rubrics and checklists, and accountability through the staff evaluation models. Leaders then monitor the implementation through observations and a structured collaborative process such as System-to-System Meetings.

When creating educational policy at the state or federal level, legislators need to consider the funding associated with implementing the policy. District and school leaders are continually frustrated by unfunded legislative mandates. A recent example of this passed by Indiana legislators is the requirement that each school corporation employ at least one Reading Specialist trained in Dyslexia. For many districts, especially small and rural districts like Green Valley, this could result in the need to hire additional staff members in budgets that are already tight due to declining enrollments and educational spending cuts. Green Valley teachers expressed their

frustration in the district cutting back on the number of interventionists due to budget restraints. These types of unfunded mandates can add to this trend.

Schools like Green Valley and Lancer have struggled to provide the ongoing professional development needed to successfully implement RTI. Many schools, especially small and rural districts, struggle to find the time and funding for professional development. Although, Title I, Title II, and Title IV funds help, they do not come close to covering the expenses for the needed ongoing professional development required to successfully implement RTI/MTSS. A potential answer to this dilemma is providing teachers with the needed professional development over the summer months. However, this takes additional funding for professional development stipends because this is outside a teacher's contract time. Legislators need to consider these ongoing battles that schools fight as they pass legislation or develop educational budgets.

## Conclusion

As shared by Bender and Shores (2007), "RTI is, in effect, one of the best instructional practices we can implement for our students. Implementation of RTI will enhance learning across the board in our classes, and ultimately benefit all of the students whom we serve" (p. viii). RTI's focus on a research-based core curriculum for all students, and early identification and early intervention for academically or behaviorally struggling students and high ability or EL students are where we maximize the benefits to our students. However, to reach RTI's true potential, schools most overcome implementation hurdles with ongoing professional development and procedures to monitor for the fidelity of implementation. I hope by putting forth this study, I have shined a light on the factors that can lead to successful RTI implementation in schools across the country.

APPENDIX A

## Standardized Interview Questions

Response to Intervention Interview Protocol

Thank you for taking the time to speak with me today, (name). I am in the process of conducting a dissertation case study on the effective implementation of RTI and its impact on IREAD-3 scores in two Indiana elementary schools. I'd like to learn more about your personal beliefs and experiences in implementing RTI here at (school name). If I have your permission, I will be recording our interview so that your answers can be transcribed later for accuracy. I want to let you know that the information collected from this interview will be used in my dissertation and you and your school will remain confidential/anonymous.

I'm looking forward to learning from your ideas and experiences, but if I ask any question that you would prefer not to answer for any reason, just let me know and we will move on to the next question. Do you have any questions for me? Let's get started…

### Background/Introduction

1. Please tell me a little bit about your background in education: what degrees you hold, your background in teaching and/or administration, your current role at (school name), or anything else that you'd like to share.

2. Describe the student population of (school name).
    - Tell me a little about the student demographics, poverty levels, special needs, achievement on state tests

### General RTI Implementation

3. Please walk me through the RTI process used in your school.

   I'm now going to ask you several follow-up questions about specific aspects of RTI, such as the tiers, to provide further clarification.

### Universal Screening

4. Tell me about the process and tools used to screen or benchmark all of your students on the core curriculum at Tier I.
    - How were those assessments selected?
    - What process does the school have in place to ensure that the screening assessments are being delivered properly or implemented with fidelity for students?
    - What processes are utilized to analyze this data?
    - Did you receive any specialized training on these assessments?

**Tiered Instruction and Tier I**

5. Once the students are identified that are struggling at Tier I based on your screening assessment, tell me about your school's RTI process to support these students.
    - How many tiers does your school use?
    - What interventions do the students receive in Tier 1 and for how long each day/week?
    - What reading materials and methods of instruction are used in students' general education class? How do you know if those materials are research based?
    - What types of specialized training has your school offered in the area of reading?
    - What process does the school have in place to ensure that instructional materials and methods established at Tier 1 are being implemented with fidelity?

**Tier 2 Instruction**

6. Tell me about the RTI processes in your school when a student moves from Tier I to Tier 2 services.
    - Who determines that a child might benefit from Tier 2 instruction?
    - What interventions are being used for students in Tier 2 and how were they identified?
    - What is the frequency and duration of those interventions at Tier 2?
    - What staff members typically deliver the Tier 2 services?
    - Do those staff member have any specific training on the interventions or processes used at Tier 2?

7. Tell me about the process and tools for Progress Monitoring students at Tier 2.
    - How frequently is progress monitored at Tier 2?
    - At what point do teachers consider a different intervention at Tier 2 or movement to Tier 3?

8. What process does the school have in place to ensure that the Tier 2 interventions are being implemented with fidelity for each student?

**Tier 3 Instruction**

9. Tell me about the RTI processes in your school when a student moves from Tier 2 to Tier 3 services.
    - Who determines that a child might benefit from Tier 3 instruction?
    - What interventions are being used for students in Tier 3 and how were they identified?
    - What is the frequency and duration of those interventions at Tier 3?
    - What staff members typically deliver the Tier 3 services?
    - Do those staff member have any specific training on the interventions or processes used at Tier 3?

10. Tell me about the process and tools for Progress Monitoring students at Tier 3.
    - How frequently is progress monitored at Tier 3?
    - At what point do teachers consider a different intervention at Tier 3 or a referral to special education?

11. What process does the school have in place to ensure that the Tier 3 interventions are being implemented with fidelity for each student?

**Staff Collaboration**

12. Tell me about how you and the other staff members at (school name) collaborate and share information about the students in the RTI process.
    - How often?
    - Do you have any special tools to assist with that sharing of information?

**Special Education Identification**

13. What process is utilized to move from RTI services to special education identification?

14. How has RTI's early identification and intervention process effected the identification of students with specific learning disabilities?
    - Do you feel that the special education identification results are more reliable after going through the RTI process?

**Additional Questions**

15. How does the school allocate resources to support the RTI process?

16. What types of specialized software or technology tools does the school utilize to manage data and communications concerning students?

17. How has building level or district level leadership supported the implementation of RTI?

18. What were the major barriers to RTI implementation at (school name)?

19. What would you do differently if you had to implement RTI again?

20. Is RTI working in your school? How do you know?
    - What parts of RTI do you contribute to your successful IREAD-3 scores?

**Closing**

I really appreciate your time today – that is the end of my formal questions. Do you have anything else you would like to add about the RTI implementation of your school? Would it be okay if I followed up with you if I have additional questions? Thank you again.

APPENDIX B

## IRB Approval


Office of Research Integrity
Institutional Review Board (IRB)
2000 University Avenue
Muncie, IN 47306-0155
Phone: 765-285-5070

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| | |
|---|---|
| DATE: | March 17, 2016 |
| TO: | Charles Grable, Ed.d. |
| FROM: | Ball State University IRB |
| RE: | IRB protocol # 870032-1 |
| TITLE: | The Implementation of Response to Intervention (RTI): An Indiana Case Study |
| SUBMISSION TYPE: | New Project |
| ACTION: | APPROVED |
| DECISION DATE: | March 17, 2016 |
| REVIEW TYPE: | **EXEMPT** |

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The Institutional Review Board reviewed your protocol on March 17, 2016 and has determined the procedures you have proposed are appropriate for exemption under the federal regulations. As such, there will be no further review of your protocol, and you are cleared to proceed with the procedures outlined in your protocol. As an exempt study, there is no requirement for continuing review. Your protocol will remain on file with the IRB as a matter of record.

**Exempt Categories:**

| | |
|---|---|
| X | **Category 1:** Research conducted in established or commonly accepted educational settings, involving normal educations practices, such as (i) research on regular and special education instructional strategies, or (ii) research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods. |
| X | **Category 2:** Research involving the use of educational test (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior |
| | **Category 3:** Research involving the use of educational test (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior that is not exempt under category 2, if: (i) the human subjects are elected or appointed officials or candidates for public office; or (ii) Federal statute(s) require(s) without exception that the confidentiality of the personally identifiable information will be maintained throughout the research and thereafter. |
| | **Category 4:** Research involving the collection of study of existing data, documents, records, pathological specimens, or diagnostic specimens, if these sources are publicly available or |



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|---|---|
| | if the information is recorded by the investigator in such a manner that subjects cannot be identified, directly or through identifiers linked to the subjects. |
| | **Category 5:** Research and demonstration projects which are conducted by or subject to the approval of Department or agency heads, and which are designed to study, evaluate or otherwise examine: (i) public benefit or service programs; (ii) procedures for obtaining benefits or services under those programs; (iii) possible changes in methods or levels of payment for benefits or services under these programs. |
| | **Category 6:** Taste and food quality evaluation and consumer acceptance studies, (i) if wholesome foods without additives are consumed or (ii) if a food is consumed which contains a food ingredient at or below the level and for a use found to be safe, by the Food and Drug Administration or approved by the Environmental Protection Agency or the Food Safety and Inspection Service of the U.S. Department of Agriculture. |

**Editorial Notes:**

1. N/A

While your project does not require continuing review, it is the responsibility of the P.I. (and, if applicable, faculty supervisor) to inform the IRB if the procedures presented in this protocol are to be modified or if problems related to human research participants arise in connection with this project. **Any procedural modifications must be evaluated by the IRB before being implemented, as some modifications may change the review status of this project.** Please contact (ORI Staff) if you are unsure whether your proposed modification requires review or have any questions. Proposed modifications should be addressed in writing and submitted electronically to the IRB (http://www.bsu.edu/irb) for review. Please reference the above IRB protocol number in any communication to the IRB regarding this project.

**Reminder:** Even though your study is exempt from the relevant federal regulations of the Common Rule (45 CFR 46, subpart A), you and your research team are not exempt from ethical research practices and should therefore employ all protections for your participants and their data which are appropriate to your project.

Bryan Byers, PhD/Chair
Institutional Review Board

Christopher Mangelli, JD, MS, MEd, CIP/Director
Office of Research Integrity

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